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THE NATIONAL GEOGRAPHIC MAGAZINE

Louisiana Trades with the World

By Frederick Simpich

With Illustrations by Staff Photographer J. Baylor Roberts

LUSH Louisiana, basking astride the Mississippi Delta, faces south on the Gulf of Mexico. Set thus on a great world trade route, she was born to barter.

On a map the Mississippi River system looks like a tree, whose roots fan out to form its marshy Delta. Big limbs are the Missouri, Ohio, Arkansas, Red, and other tributaries. Cities as far apart as Pittsburgh, Omaha, and New Orleans haul freight on the flood.

Linked with the Intracoastal Waterway (which ties Texas to Florida), this net gives Louisiana access to nearly 15,000 miles of navigable inland and coastal waterways!

What with railways and truck lines, these rivers and canals make paths for men and goods moving between the rich, factory-dotted Midwest and globe-girdling sea lanes that run in and out of the busy Gulf.

There's nothing new about this trade route. It's just busier. Coonskin-capped Kentuckians sent flatboats loaded with flour, live pigs, and cattle down the Ohio and Mississippi as early as 1782.

Pioneer St. Louis traders floated furs, venison hams, and lead for bullets down to New Orleans, swapping them for weapons, axes, wild-animal traps, and drugs, even perfumery, silks, and musical instruments.

Later the first locomotives used on Midwest rails came from the Atlantic coast, through the Gulf and up the Mississippi.

City That Care Forgot

Today New Orleans is one of our busiest ports. It's not exactly a seaport, for it stands 110 miles up the Mississippi from the Gulf. (See map supplement to this issue.) But ocean-going craft easily reach it, and many go on to Baton Rouge, farther upstream.

To the Deep South New Orleans is a center of wealth, culture, and social leadership. To hosts of travelers it is the "city that care forgot," Mecca for honeymooners and pleasure seekers.

Most Louisiana visitors rush straight for New Orleans. They're eager to see Mardi Gras, taste French food, prowl noisy night spots, outsmart Royal Street antique dealers, or swap blithe banter with Creole maids who sell perfumes and pralines and play accordions in Bourbon Street cafes.

"America's most interesting city." That's what many insist. When I dined in the old French Quarter at the "Court of the Two Sisters" and heard Louisiana historian James J. A. Fortier recount its melodramatic past, I too felt its romantic, *Arabian Nights*-like spell.

On the Back Roads and Bayous

But that's another story, that saga of New Orleans and its adventurous annals of pirates, smugglers, duels, quadroon balls, steamboat races, and gentlemen gamblers.* What I came to write is the modern story of sprawling, changing Louisiana itself, a State that has seen pioneer barter built up into a sea-borne commerce that now covers the earth.

Slow and easygoing these friendly people seem—at first. A sign on the Western Union door at Leesville said, "Gone to coffee. Back in 30 minutes." All over the State everybody knocks off for mid-morning coffee. At the merest hint they'll drop their tools and go fishing. But don't let that easy gait fool you.

* See "Louisiana, Land of Perpetual Romance," by Ralph A. Graves, National Geographic Magazine, April, 1930.

In Louisiana's Gray-bearded Swampland, Even a Rolling Stone Could Gather Plenty of Moss

This picker of Spanish moss on a lake near St. Martinville plies his pole from a ten-foot platform built on a flatboat. The gray, gracefully hanging growth, called "Spaniard's beard" by the French and "Frenchman's wig" by the Spaniards, has been used for pillows, mattresses, and other articles since early colonial times. The black, horsehairlike inner fiber is used today chiefly in upholstery.

Remember that tortoise who outran a rabbit?

Ride out of New Orleans in any direction and you run into other worlds. Only a short hop from its airports you may look down on country roads dotted with top buggies hauling happy people who live within their income.

On the Industrial Canal that links the Mississippi with Lake Pontchartrain rattles and smokes the great Higgins plant. Here they produce a completed camp trailer every six minutes and 100 boats of all types a week. Yet downstream behind the levees I found an old man planing a cypress board to glossy smoothness, making a fishing boat—a three-month job.

He can't read, but he has "literate" hands. He loves his art. His kindly smile over his work proves the old saying that to be happy is to love to do what you have to do.

Rowing up one bayou, we met a French-speaking boy. He was scraping grass along the water's edge with his pirogue paddle, hunting tiny turtles, the kind you buy alive in curio stores, with pictures painted on their backs.

This lad was 16, barefoot, and had never seen New Orleans. But he might well take his light dugout and win Bayou Barataria's great annual pirogue race, that aquatic Kentucky Derby of the marshes (page 722).

Drilling for Oil in Watery Wastes

On down a lonely levee road, almost to the Gulf itself, we came unexpectedly upon a giant dredge, digging its own channel into the marshlands, just as a mole digs its own tunnel.

Through such ditches barges haul pipes, steel for derricks, and all the equipment for sinking oil wells, to a spot picked by petroleum geologists.

Airplanes Sow Rice When Fields Are Too Muddy for Use of Land Machines

Flying between 15 and 20 feet, a pilot of the Louisiana Flyers Service, Lake Charles, plants 100 pounds of seed per acre. A diagram marks each row so the pilot will not miss a strip or sow one twice (page 721).

Staff Photographer B. Anthony Stewart

This Fat-tired, Grotesque-looking "Marsh Buggy" Navigates Bayous and Lagoons

Like a seagoing automobile, it can rock and wobble its clumsy way through water and deep, liquid mud. Field workers of the Gulf Oil Company use this one in the Lake Hermitage region oil fields (page 709).

A Muskrat Trapper's Wife Cooks Lunch while Drying Pelts Hang over the Kitchen Stove

Behind the stove the trapper's hip boots are also drying, as the family fox terrier licks the baby's platter clean. Trappers' families don't mind the smell of the pelts—that's where the money comes from (page 723). Oil men move in now to dispute swampland dominion with the trappers.

What a bonanza this watery waste proves to be! Humble, Shell, Tidewater Associated, Magnolia, Texas, Standard of New Jersey, Socony-Vacuum, United Gas Corporation, and others all drill here, knee-deep in muskrat grass. But it's like boring holes in a Sargasso Sea.

No wheeled vehicle but the clumsy amphibious "marsh buggy" dares venture in. Its absurdly fat tires let it run on top the mud or swim open water (page 707).

Work crews blow mosquitoes away with airplane propellers used as fans. Cattle, grazing on the *chênières*, or drier oak-grown flats, have died from being stung too often about nose and eyes.

One oil-field crew I saw lives in a houseboat, with screens. When they move "camp," a tug hauls their floating hotel.

Geophysicists, prospecting for new wells, may ride a marsh buggy.

Strangest of all is their quest by boat in the open Gulf. Here as well as in the marshes seismologists fire off heavy dynamite charges, sometimes killing near-by fish, depth-charge fashion, and jolting shrimp and oysters (page 710).

"How Did You Win That $5 Grin?"

"I caught this guinea, sir," he said. The Lions Club turned it loose at a Fat Stock Show in Beauregard Parish and offered a prize of $5 to the boy who could catch it.

To drill a submarine well, a platform to hold the derrick is set up on piles stout enough to withstand (they hope!) hurricanes that sweep the Gulf.

Tidelands Yield Oil, Fur, and Food

One Magnolia well is 23 miles offshore. When the sea gets too deep for platforms, a well may be "bent." This "directional" or lateral drilling is done with a whipstock, which bores the hole horizontally, straight out under the sea, at an angle from the original vertical well. Lately, Louisiana has leased more than 1,000 square miles of this "continental shelf" to oil companies at more per acre than the acre cost of many farms in the 1930's.

These oil-bearing tidelands stretch from the Mississippi west to Texas, and from their bayous, ditches, and estuaries thousands of muskrat trappers, shrimpers, and oystermen reap fortunes in fur and foods. More muskrats are trapped in Louisiana than in any other State (pages 708 and 723).

Crews on some shrimp boats consist of father, mother, and children. In nicking the heads off a shrimp with their thumbnails or helping handle the nets, many children are as clever as their elders (page 726).*

* See "Delectable Shrimp," by Harlan Major, National Geographic Magazine, October, 1944.

H. I. Nesmith and Associates

Seeking New Oil Pools, Prospectors Wade the Marshes

This is a "shooting party," out to make seismograph recordings. They determine subterranean geological structures by use of a sonic device. The lead man carries dynamite; the second carries sticks which are fastened together to lower the explosive into a drilled hole. Third and fourth men carry reels of wire, which connect to geophones spaced at regular intervals of several hundred feet from the shot holes to pick up the echo of the blast and record it on the seismograph apparatus. Depth and contour of formations below are figured out by measuring the time it takes for echoes of blasts at different points to bounce back to the surface (page 709).

In widely scattered huts these marsh folk lead lonely lives. Children ride in boats to school and church (Color Plate XVI). Roads are few. Along one road a doctor makes weekly trips. If anyone is sick, occupants hang out a white flag, a signal for the doctor to turn in.

This Gulf coast is so low, flat, and storm-swept that few towns stand on it. No part of all the United States coastline is so empty of human life. But along its north edge you find such prosperous towns as Houma, Morgan City, Franklin, New Iberia, and Abbeville, and so on west to Lake Charles.

End of Evangeline's Trail of Heartbreak

New Iberia, on Bayou Teche, was settled about 1765; today it has some 18,000 people, largely of French and Spanish descent. Visitors come to see its early homes, to enjoy a walk through the Jungle Gardens of near-by Avery Island, or to go north to St. Martinville for a look at its old Roman Catholic Church and its historic archives and to visit the Evangeline Oak.

Film actress Dolores Del Rio played the part of Evangeline, then posed for the Evangeline Monument which now marks the grave of Acadian immigrant Emmeline Labiche, who, says tradition, was the original of Longfellow's heartbroken heroine.

In its heyday, St. Martinville was known as "Little Paris." In the French Revolution refugees fleeing here included barons, marquises, counts, and countesses. The minuet was danced; some ladies came to balls in jewel-covered gowns they once had worn at court in France.

One faded epitaph reads: "Jne. Aspasie Bienvenue, Espouse de Fre. Olivier Deveron. Décédée le 27 Nov. 1811, âgée de 26 ans. Femme respectable et tendre mère."

Booming Shreveport Smacks of Texas

But what a difference between this tranquil, easygoing Cajun country and such restless boom towns as Monroe and Shreveport, in the northern part of the State.

"We're as far from the Gulf coast in our way of life as we are from the China coast,"

said John D. Ewing, publisher of the *Shreveport Times*. "I know. I was born and raised on the Gulf. I swam the Mississippi when I was 13, and watched hunters lasso alligators."

Shreveport, near the Texas line, resembles Dallas. It's full of cowmen in boots and big hats. Some streets here are named for early Texas heroes who passed this way to fight the Mexicans. At a Rotary luncheon a joker shouted that every man from Texas should stand—and all got up but four!

This rich, noisy town turned Indian tepees into skyscrapers, and dusty cow trails into paved highways. It's named for Henry M. Shreve, a steamboat man who helped Andy Jackson defeat the British under Pakenham at the Battle of New Orleans. He made it a Red River port. He cleared that river of its famous "raft," a giant log jam 160 miles long and centuries old, and opened it to navigation when Congress ordered this done.

Via Hero from Pan American Airways

A Calm Ass and Nervous Calf Fly Off to Nicaragua

This Noah's Ark of the air, launched by Oscar R. Whilden, New Orleans livestock broker, also carried purebred pigs, several horses, some Ohio calves, baby gamecocks and hens, and three Airedale pups. "I ship lots of high-grade livestock by this Pan American flying Noah's Ark," said Mr. Whilden. "I serve no meals aloft, need no hostess—but get 'em there quick, and mortality insurance costs less than by surface ship" (page 728).

Here rises one of the country's great glass works. Shreveport dehydrating machines are used to dry sweet potatoes all over the South (page 721), while "stop-and-go" signs made here are used in New York City streets (Plate IV). Some of its luxurious homes shelter the families of Wisconsin and Michigan lumbermen who came here and amassed fortunes when virgin forests were thick.

Oil and Gas Supplant Cotton as King

When cotton was king, plantations of feudal magnificence flourished in rich, alluvial Red River Valley. Shreveport streets were blocked with bales; brokers worked in linen dusters, with lint in their whiskers. Today cotton is a mighty crop, and the making of cottonseed oil and cake is a big industry. But oil and natural gas are supreme.

Caddo Lake country, northwest of Shreveport, brought in pioneer oil wells. Near-by Texas and Arkansas fields add to the city's growth. Excited by oil booms, people flock here from every State in the Union.

Through its far-flung system the United Gas Pipe Line Company now delivers natural gas to customers from Mexico to Florida.

At Shreveport's Barksdale Field are the headquarters of the Army Air Forces' Air Training Command.

Shreveport is a good place to live. "The

bass get so hungry around here," says fisherwoman Ceola Curran, "that they've been known to jump out of the water and snap at a blackbird teetering on a lily plant!"

We drove south from Shreveport through Mansfield and Many, then east to Kisatchie National Forest. We saw men planting young trees, and cameraman Roberts took a picture of a fire fighter in action (Plate XI).

From here south to Kurthwood, on the road to Leesville, lie infinite leagues of empty land dotted with old stumps. Yet, despite ruthless cutting, shiploads of lumber still leave the State, to meet shiploads of foreign mahogany coming in—all a part of the net that holds our overseas trade together. Wood in all its forms helps the march of civilization.

Today 52 percent of the State is still forest area; 720 industries depend on trees for raw products. Originally there was an estimated 197 billion feet of standing timber, equal to one 12-by-1-inch board more than 37 million miles long!

Pioneers found more than 100 kinds of hardwood growing here. Soon after the Civil War, Baltimore and Philadelphia sent here for schooner loads of pine. Sawmills by the hundreds rose as railways spread. Southern pine built towns all over America and dominated the lumber markets of the world.

"Yet," declares Assistant Forester J. H. Kitchens, Jr., "our woodlands today are not worked at potential capacity. We have about 1,500,000 barren acres that need replanting. Fire is hurtful and so are bad cutting practices.

"But we see timber as our one replaceable natural resource. With the help of aerial fire patrols, radio-controlled fire crews, and all our replanting, we now grow more trees than we cut."

Ruts Recall "Battle of Louisiana"

Through stump-strewn hills on the road to Leesville you cross a network of ruts, deep and lasting as those old Santa Fe Trail ruts across the plains of Kansas. These were worn by tanks and cannon when some 350,000 troops maneuvered here in World War II.

"When the Army built Camp Polk here at Leesville," said one farmer, "we sure learned a lot about other kinds of Americans. Yankee soldiers married our gals; they shot all my frogs and they killed my goldfish when they washed their soapy socks in my pond. But I guess that's war."

Now Leesville is back to normal, with some 3,500 population, talking politics, listening to courthouse comedy, or going hunting.

"I brushed off a goose yesterday," said ex-sheriff Tom Bullock.

For decoys some hunters use old newspapers, twisted in the shape of a long-necked goose and dropped on the grass.

With Mr. Bullock I rode west to the Sabine River, the Texas border. This is the poorest part of the State I saw. You wonder how it lives.

"When my father ran steamboats on the Sabine," said one old lady, "lots of people lived around here, cutting lumber, and trade was good. I used to wring two chickens' necks at once, holding a chicken in each hand. Now there ain't a chicken on the place. It's hawks, I guess, and foxes.

"Wild foxes seemed to be all mad this year. They bit horses and cattle. In broad daylight a fox ran into one woman's backyard and tried to bite her as she was hanging out her washing. We're scared to go outdoors without a club."

Armadillos Dig Up Flower Gardens

Land gets better, houses newer and bigger, as you near De Ridder on the road south to Lake Charles. In this warm, lush land of sun and rain, flowers grow as in a hothouse—when armadillos don't dig at their roots!

"These clumsy creatures really have us garden fans hanging on the ropes," said an azalea lover. "Lately they're swarming over from Texas. Some say they swim the Sabine; others claim they lope over the bridges.

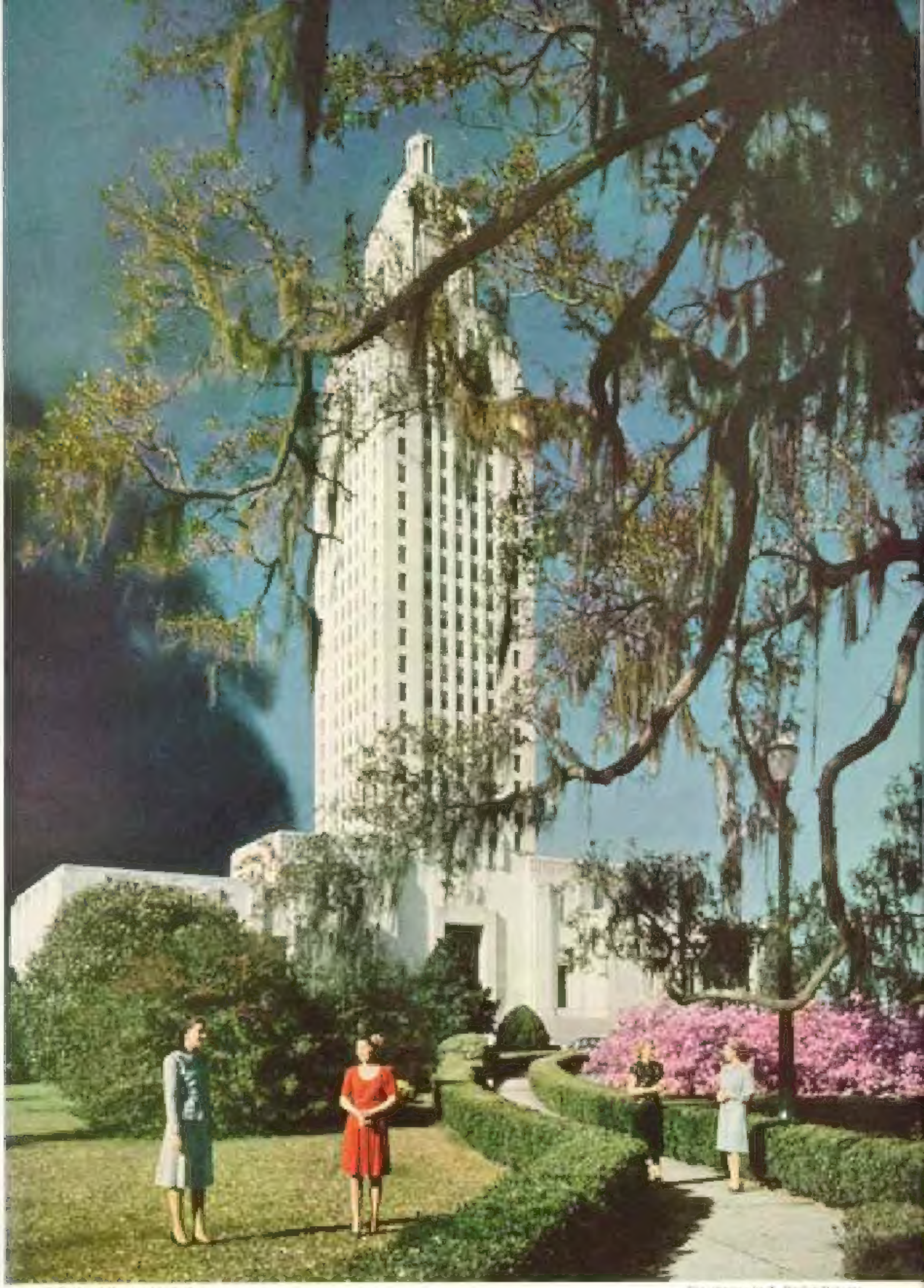
"Anyway, they're devastating our countryside. Digging for earthworms and crickets, they root up lawns and wreck flower gardens worse than pigs. It's hard to shoot 'em, since they raid only at night. To make it worse, the nasty things always have quadruplets."

Before railroads came, Lake Charles was a rough-and-tumble town of slavers and smugglers; then of shouting, shooting cowboys driving longhorns in from Texas, swimming maybe 2,000 a day across the Calcasieu on their way to meat-hungry New Orleans. Sawmills later made this a huge lumberyard.

Marion, it was first called. Pioneers didn't like that first site, so they loaded their log jail and courthouse on oxcarts and moved the town to where the city now stands, beside beautiful Lake Charles and the Calcasieu River (page 727).

To fly over this tree-shaded, flower-strewn city is like looking down on Eden, with the Hanging Gardens of Babylon set about palatial homes on Shell Beach Drive, where one private garden alone grows 17,000 azaleas and seas of camellias.

In place of Nebuchadnezzar's palace and the Tower of Babel rise enormous plants that make butadiene, caustic, ammonia, chlorine, and soda ash.



Louisiana's Towering Capitol Scratches the Clouds over Baton Rouge

Visible leagues away, this glistening edifice is a popular landmark for pilots. Each of its 48 steps is marked with the name of a State and the date of its entry into the Union.

Rex, King of Carnival and Lord of Misrule, Leads His Queen on Mardi Gras Day

Across at Shoppers, Downtown Department Park Grand Street Theatre Mardi Gras

Want a Motorist's Nightmare? A Whole Block of Puzzling Traffic Lights. Some Say "Stop" as Others Say "Go"

Gondolas, Salem Dancers at Mardi Gras in Louisiana

Police Chief O'Neil Swings a Mean Nightstick Shillelagh

This Standard Oil Sphere at Baton Rouge Holds Isobutylene for Synthetic Rubber

Veins and Arteries of a Refinery Radiate from the Transfer Manifold

Great Refineries and Other Industries Make Baton Rouge One of the Southwest's Busiest Cities

Elias & Jessica Mae Swagger Wright [illegible] Elias Nova Tinsley Green

[illegible]

Our Sub Glasses Are Made for Circle in Look

[illegible]

Roaring so loud that on still nights you hear it miles away is the great $80,000,000 Cities Service refinery, whose "cat" crackers blow 60 tons of catalyst powder a minute into gas oil to make high-octane fuel. What a noise! Only a lion big enough to scratch his back on the Empire State Building could give such a growl.

Down to the Gulf Go Laden Ships

Southward stretches busy Calcasieu River and Pass Deep Water Channel, reaching the Gulf 35 miles away. Riding down the Channel, we saw tankers going to sea with oil products from Lake Charles.

There was a lumber ship loaded with Louisiana longleaf timbers for the Netherlands, one with Minneapolis flour for Brazil, one with Louisiana and Texas rice for Puerto Rico, and yet another with California and Arkansas rice for Manila—a ship that had brought in crude rubber, hemp, and copra.

Cameron town stands near the Gulf end of the Channel, in a vast coastal plain of cow ranches broken by muskrat swamps. It's so peaceful that its jail has been used as a corncrib!

One coon hunter baited his trap with a dead bird and caught a buzzard that had been banded years before on Avery Island.

We talked with a water-front grocer whose tiny store is packed to the ceiling with canned goods.

"I sell maybe $100,000 worth a year to the fishing boats," he said. "Though they're knee-deep in shrimp, oysters, and fresh fish, these sailors dote on canned salmon!"

Twilight fell as we turned back upstream. "Look quick, there in the water!" exclaimed my companion. "It's an alligator with horns!"

In the dusk, it did look a bit sea-serpenty, but it was only a cow, swimming with her back under and only her face and horns showing.

Our South Raises More Rice than the Whole United States Eats

That night I dined at the home of Capt. Harry G. Chalkley, Jr., USN, retired, who runs pumps that would suck the Calcasieu dry if it were not for the tremendous volume of water in this slow, clear river—pumps that pull 100,000 gallons of water from the stream per minute and throw it on 40,000 acres of land.

Rice here is sown and fertilized from airplanes (page 707).

"Since 1647, when Governor Berkeley started it in Virginia, our rice culture has had a vivid history," says Homer L. Brinkley, general manager of the American Rice Growers Cooperative Association.

"South Carolina in its early days supported what was perhaps our first agrarian aristocracy. Civil War, hurricanes, and competition from other regions wiped that out. Now ours is the leading rice State; we also help feed a hungry world. Shiploads go to Italy, Puerto Rico, even the Philippines (a rice-growing country). Louisiana rice is one of Cuba's largest food imports."

Here in southwest Louisiana we saw the most cattle, though the State still imports 40 percent of its meat products.

Stock raising once got a setback from tick fever. To banish ticks, Louisiana built a fence along much of the Texas border and passed a law that said dip everything with hair on its back. They couldn't catch all the wild horses to dip them, so they shot a lot.

Many men argued that ticks may serve a useful end or they wouldn't have been created! A few State officials trying to enforce the dipping law were shot by farmers.

Free of Tick Fever, Herds Multiply

By 1936 the State got free of tick fever, since then herds have doubled. Herefords [illegible] between Aberdeen-Angus and Brahman bull enthusiasts.

"These humpback Brahmans were first brought here by an Englishman who came to study sugar planting," said J. M. McLemore, who operates a big Brahman breeding ranch near Alexandria and whose 11-year-old son handles the ranch pay roll.

"They're ideal fever-resisting cattle. Their sweat glands give off an oily secretion repellent to ticks."

We drove our motorcar slowly into a herd of dehorned Brahman heifers. With the curiosity of antelope they crowded about us, thrusting their funny faces almost against the window glass. Big ears, like a dog's, set far down beside their cheeks, give them a clown-ish look.

Forage crops here include Dallis, Bermuda, Dutch white clover, lespedeza, etc. But, to fatten cattle for market, feed must be imported, and carloads of animals are shipped north for final fattening in Midwest corn-feeding lots.

Use of dried sweet potatoes as stock feed promises to change the whole bovine business.

For this all the South applauds Dr. Julian C. Miller, Head of Horticultural Research at Louisiana State University. Though he is noted for his breeding ingenuity with

Acadian Trappers, Hunters, and Fishermen Compete in Their Famous Annual Pirogue Race on Bayou Barataria

[illegible]

[illegible] sugar cane, rice, and cotton. In 1803 the United States purchased the Louisiana Territory from France, and the Acadians were soon joined by other settlers from the East Coast.

Most [illegible] Acadians lived in [illegible] towns, some of which had populations of [illegible] people. The majority [illegible] farmers, hunters, trappers, and fishermen.

A hundred years ago, the most [illegible] to Acadiana, [illegible] sugar cane plantations. In [illegible], slaves imported in the West Indies or Central America [illegible] Before that United States Army [illegible] New Orleans [illegible] Native Americans [illegible] sugar cane as food for the survivors.

[illegible] the most [illegible] sugar cane [illegible] Louisiana. The [illegible] the [illegible] 1900 the Acadiana [illegible] 700,000 pounds of dry sweet potatoes [illegible]

Cattlemen Salaam to the Yam

[illegible] exports [illegible] 75 [illegible] pounds [illegible] level.

[illegible] equal to [illegible] and the [illegible] have an nutritious [illegible] for livestock.

[illegible] Bayou [illegible] water [illegible]

Hundreds of Square Miles of Water Marshland Form the Rich Fur-trapping Regions of Southern Louisiana

Trappers [illegible] the lower [illegible] Mile [illegible] into the water [illegible] believed that periodic burning of dried [illegible]

potato drying plants than we have cotton gins."

"My big registered Aberdeen-Angus herd never [illegible] corn," says Lloyd J. Cobb, who [illegible] Ranch near St. [illegible] I feed [illegible] sweet potatoes with Mr. Douglas Warriner and I dry [illegible] plant at St. Francisville.

I think [illegible] will finally replace corn [illegible] in the South because we can grow from 200 to 500 bushels of yams on [illegible] of land, whereas our corn crop may [illegible] more than 15 to 20 bushels. [illegible] the South will save the [illegible] it now spends for imported [illegible]

[illegible] plant [illegible] consumption. We pack them under the 'Maryjane' label and those of a score or more of wholesale grocers, for sale all over the United States."

We made a [illegible] Mr. Cobb [illegible] daughter, Mary, feeding dried [illegible] 1,800-pound bull on her father's [illegible] sam-fed bulls and calves [illegible] ribbon prizes at various [illegible] shows (Plate VIII).

Here [illegible] or no French [illegible] families [illegible] from Virginia and the [illegible] and Spanish [illegible] epitaphs about Grand Church [illegible] bearing names of men prominent in State [illegible]

Mrs. Mary Willis of St. [illegible] me to visit at Highland, a stately home [illegible] by her ancestor, William Barrow, in [illegible] Though it is not open to the public, its present owners, Mr. and Mrs. D. I. Norswand, [illegible] gracious hosts.

Mrs. Norswand, like Mrs. Willis, is a descendant of the first Barrow who came to West Feliciana Parish. For six generations

This Red River Parish Cypress Is Five Feet Through

[illegible] Mr. Newsome [illegible] Baton Rouge [illegible] Louisiana [illegible] painted that [illegible] No! He didn't paint the turkey [illegible] — just a picture of it.

Baton Rouge Still Can't Believe It!

With 1,000 big silvery tanks [illegible] steel bottles, Houston [illegible] Baton Rouge [illegible] Louisiana [illegible] production.

[illegible] of the world's [illegible] oil [illegible] refineries [illegible] operations [illegible] chemical works. [illegible] Houston [illegible] Baton Rouge [illegible] refinery [illegible] petroleum.

[illegible] Mr. Newsome [illegible] Baton Rouge [illegible] water tower [illegible] tanks, and [illegible] in town for Saturday's market.

[illegible] Old [illegible] Plates VI and VII.

[illegible] is first turned into [illegible] fuel [illegible] gasoline, [illegible] and [illegible]

Order a Quaint Rice by Mail and She Comes Packed Like This

[illegible]

Massive Bronze Doors Lead into the State Capitol's Senate Chamber

[illegible]

This Is One of Many Stranglehold Platforms Which Have Been Built on Piles over Mud Bars Around Barataria Bay

[illegible]

Other [illegible] go to plants making rubber, [illegible], and alcohol.

In [illegible] scattering out the refineries were one of the biggest [illegible] aviation gasoline to Uncle Sam and his allies. Other large industries [illegible] Dub Solvay [illegible] Ethyl Corporation, Permanente Metals Corporation, General Chemical Company, [illegible] Chemical Industries, Inc., [illegible] Gulf States Utilities Company.

From here, as or[illegible] products [illegible] cut by rail, barge, and [illegible] into the vortex of world trade.

Scientists Saved This Sugar Bowl

From the [illegible] top of the State Capitol tower in Baton Rouge you look west, across Old Man River, to see cane fields and tall smokestacks of sugar mills.

[illegible] with Spanish moss.

[illegible] what [illegible] New Orleans and [illegible] crashed to make granulated sugar. At one time sugar making was the State's richest industry. It earned fortunes for [illegible] planters of that golden age.

A few decades ago, cane disease [illegible] planters low; [illegible] pathologists rescued the industry. They brought in vigorous [illegible] kinds of cane. Now sugar [illegible]

On the Mississippi [illegible] what looked like [illegible] dust. It was sulphur, which helps make this Gulf coast a world source of heavy chemicals.

Crooked as the Orinoco Delta, the Calcasieu River Cuts Odd Forest Patterns Around Busy Lake Charles

[illegible]

[illegible] with its old [illegible] gunpowder. A Greater [illegible] from New Orleans [illegible] Company [illegible] 2,000 [illegible] These mines are deep holes [illegible] water and compressed [illegible] sulphur to [illegible] (Photo No. [illegible])

Airplanes Thick as Pelicans

Airplanes make New Orleans [illegible] Mardi Gras ball was a Mexican [illegible] from [illegible] to enjoy the American [illegible]

Latin Americans often fly to New Orleans [illegible] Mexico [illegible] Mexico [illegible]

[illegible] Mexico's prosperous [illegible] Canal Street and flown to [illegible] Mexico, [illegible] Panama. Mexico's International Airport is only a few [illegible] Canal Street. Latins [illegible] New Orleans where perfumes [illegible] craftsmen settle on the [illegible] will attract customers.

Air service lifts travel horizons for people in the Mississippi Basin. [illegible] a few [illegible] flight [illegible] here to Central American countries. Peru, Chile, and Argentina [illegible] New Orleans via [illegible] American and Pan American-Grace Airways [illegible] Air freight and [illegible]

A Noah's Ark that Flies

A [illegible] jumper over the moon in *Mother Goose*. [illegible] in an aerial Noah's Ark.

We photographed one sad-eyed jackass at the open door of a Managua-bound Pan American plane, taking one last look at Louisiana and braying a lachrymose farewell.

On another day from a flying ark came the bleats, bawls, barks, brays, grunts, and cackles of sheep, goats, heifers, bulls, jacks and jennets, hens, gamecocks, and three Airedale pups.

"I fill the air with a steady stream of southbound animals," said Oscar R. Whilden, Louisiana livestock exporter. "I also ship thousands of work mules by steamer to Cuba, Jamaica, Puerto Rico, Trinidad, and South America.

"It's quicker, and mortality insurance costs less, to fly valuable race and saddle horses, pedigreed cattle, sheep, and poultry. I build pens and stalls on the plane's floor . . . No, I serve no meals aloft, and need no hostess" (Page 711.)

Odd Items Figure in State Exports

In south Louisiana the town of Rayne, on Highway 90, busy rice place, also ships big frogs. One weighed three pounds. Many are shipped alive for aquariums or for biological work. Half a million have been sold in one season.

Here the Japs once bought live frogs, for fouling their frog-leg trade in the Far East. Now men here tan frog skins for making belts, purses, and hatbands.

Every pipe lover wants perique in his smoking mixture. The whole world's supply comes from some 400 acres in St. James Parish, west of New Orleans. "Type 72," tobacco blenders call it; England, Canada, the Netherlands, and Belgium are the chief buyers.

Nearly all the shallots eaten in America come from a region within a 100-mile radius of New Orleans (Plate XIII). From the orange belt in Plaquemines Parish comes also part of the Nation's supply of Creole Easter lily bulbs.

Salt deposits were worked by Indians before De Soto came. Three of the world's big mines are found in the "Five Islands" region near New Iberia. Millions of tons have been shipped (Plate VIII). Jefferson Island, in this group, was owned by Joe Jefferson, American actor who played "Rip Van Winkle."

Spanish moss, picked from trees and cured, is used in mattresses and in upholstering furniture and motorcar seats (page 706).

"When Andrew J. Higgins dynamited stumps from swamps on the Industrial Canal, near New Orleans, to build a boat factory, spectators saw alligators blown high into the air," said Clarke Salmon, Sr., former editor of the *News*.

Alligator skins, 25,000 to 35,000 a year, are shipped from this State. Some gators are shot at night with aid of flashlights; some are caught with meat-baited lines. More daring hunters catch them with their bare hands!

Negroes sometimes eat alligator tails. Near Burns I talked with a woman who said her menfolks bait alligator hooks with young cranes and herons.

We long depended on China for tung oil made from tung tree nuts. It's used by paint and varnish makers. Groves of these precious trees now grow from Texas to Florida, especially in Mississippi and Louisiana. Today some 5,000 growers pick 47,300 tons of nuts a year, yielding close to 20,000,000 pounds of oil worth many millions.

Mountains of freight are loaded or unloaded the year round at this State's deep-water ports—New Orleans, Baton Rouge, and Lake Charles.

Alcoa, Delta, Grace, Lykes, United Fruit, Waterman, and dozens of other lines help handle overseas trade. On miles of docks at New Orleans and Lake Charles you see endless export items, from live mules to second-hand Mardi Gras floats—the latter for South American fiesta use.

Goods for abroad include flour, lard, lumber, automobiles, trucks, farm implements, pleasure boats, oil products and oil field machinery, cement, drugs, surgical and surveying instruments, tools, builders' hardware, shoes, typewriters, barbed wire, furniture, beer, bottles, and canned goods.

How Ships Link Louisiana with Other States and the Seven Seas

"Except New York, this is the only American port that offers a well-balanced two-way cargo," says Theodore Brent, President of the Delta Line (Mississippi Shipping Company, Inc.).

"Growth of our imports is impressive. They include raw sugar, green coffee, chicory, cocoa beans, mahogany logs, jute, sisal, chicle, molasses, Philippine copra and hemp, oils, fats, crude rubber and latex, hides, skins, tapioca, rum, coconuts, and, of course, bananas at the rate of a million stems a week."

Mr. Brent grew up in the Midwest and spent years handling traffic on inland waterways.

"You have only to look at all the factories from Pittsburgh to Kansas City," he says, "and then note how big industries are rising in the South—as in Birmingham, Memphis,

World Trade's Carole at New Orleans' International House

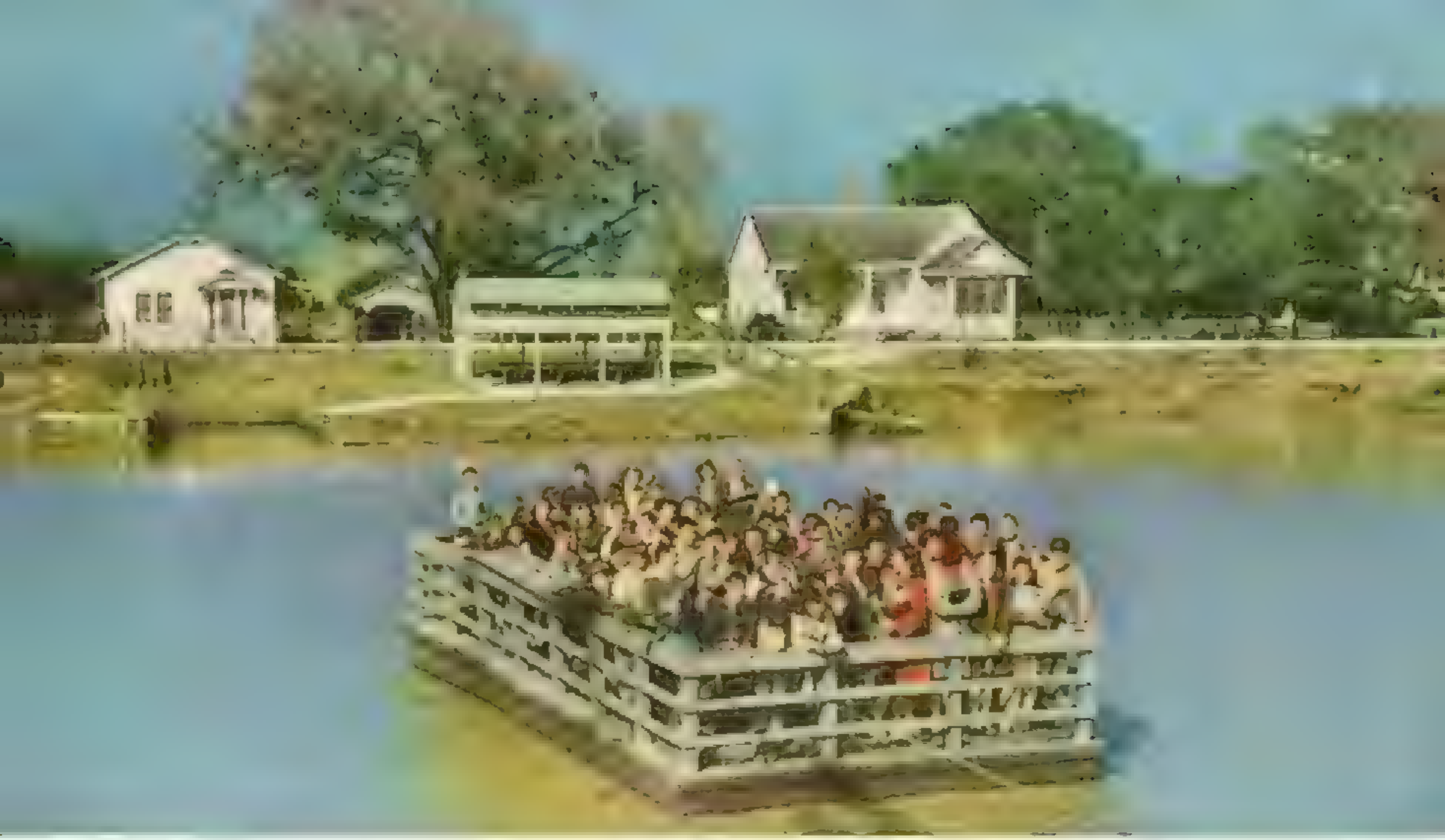
That Yellow Cliff Is Sand Separated by the Power Shovel Lands Upon a Belt Conveyor and Transported to Revolving Barges

This State Fire Fighter, with Radio-equipped Jeep and Fog Nozzle, Shows How Important Forest Fires Can Be Controlled or Extinguished

A Wildfowl Display in the State Exhibit Building, Shreveport. Interests Hunters

This Store on Wheels Saves Housewives Trips to Market

Program Small Unions We Washed and Ironed for Stamps to Farmers



New Grade Queen Liners Speak Passengers Have More Fun Than School Kids Riding to Obscure Lives on Bassett Lampreds

Cypress Trees Are Growing Together near Bayou Teche for Tows up to a Sawmill

A School Bread Raising Where a Bus Conductor Heads Pupils in Classes at Gibson

"Mama Mama Lebasso" – Famous Entertainer Blind Sister Leases from Negro Island

Little Rock, Shreveport, Baton Rouge, Lake Charles, and over in Texas—to see how big our stream of goods moving down to Gulf ports is becoming.

"To help haul such goods to overseas markets, Delta has recently started a new line to serve some 14 ports in West Africa."

Steel, iron pipe, and oil machinery form a big part of down-the-Ohio-and-Mississippi cargoes. We heard that big loads of these things would soon move from here to the Red Sea and Persian Gulf for Arabian oil fields.

Mountains of Nitrates and Bauxite

From Chile this year Grace freighters are bringing mountains of nitrates to Lake Charles for use in fertilizing cotton fields.

Alcoa ships bring bauxite from Surinam for making aluminum.

"Bulk of our outbound traffic originates in the mid-continent area," says W. H. Trauth, Alcoa's Southern Division manager, "in the vast industrial empire that lies between the Alleghenies and the Rocky Mountains."

Besides its freighters, Alcoa operates the liners *Alcoa Clipper* and *Alcoa Corsair*, offering fast passenger and freight service to Jamaica, Netherlands West Indies, Venezuela, Trinidad, and Barbados.

Delta Line has just launched three new liners, *Del Mar*, *Del Sud*, and *Del Norte*, whose cabins resemble hotel suites. I was invited on *Del Sud's* shakedown cruise to Habana. I declined, to stay in Louisiana and interview certain men to get this story. After the *Del Sud* had sailed, I found that nearly all the men I wanted to see were on that very cruise!

"We got our start shipping live cattle to Cuba in 1880," said Solon D. Turman, vice president of Lykes Bros. Steamship Company, Inc.

"In the Spanish-American War one of my kinsmen was in charge of the transports that moved General Shafter's army, mules and all, to Cuba. Today we own 50 new ships, charter 82 more from the U. S. Maritime Commission, and traffic with many Latin American ports and with the United Kingdom, Europe, Africa, and the Far East."

From Mules to Boa Constrictors

As in the beginning, this globe-girdling line is still popular with livestock shippers. Its steamer *Scottsburg*, on four trips, took 3,150 mules to Turkey, and lost only 11. They died of distemper.

Ortello, that famous $90,000 Italian race horse, came to America on a Lykes ship, the *Highflyer*. When our troops landed in Italy, Mussolini sent this horse deep into Germany for safekeeping.

Other odd "livestock" rides these ships. From Colombia came squirming boa constrictors for the W. A. King snake farm at Brownsville, Texas. On that voyage, after a "blessed event," 14 baby boas were given the freedom of the sunny deck!

To handle traffic faster, New Orleans is working for a tidewater ship channel. This will be a short cut across the swampy muskrat lots from the city down to the Gulf, a faster route than winding Mississippi passes.

Already, too, New Orleans has set up a smuggler-proof "free port" foreign trade zone, a old Hanseatic League style. Here goods from abroad may be unloaded for reshipment to other foreign ports without paying American customs duties.

Clearinghouse for International Trade

To become the capital of U. S.-Latin American trade is the city's ambition. Her International House, first of its kind in the States, is a part of that plan.

This global office-club, with all its interpreters, bilingual stenographers, and trade and banking advisers, gives American and foreign businessmen a quiet, convenient place to meet, talk, and dine (Plate IX). Its telephones echo with foreign tongues. Lunchtime in its lobbies is like a noonday at the Tower of Babel must have been.

Daily guest book signatures may show fifteen or more nations represented by buyers and sellers, scholars and tourists visiting this unique organization.

Concrete results? A Kansas City dealer asked, "Where can I sell radios abroad?" They told him, and that same day he found an overseas customer for 1,000.

An Alabama farm implement dealer asked for help. He got an order from Venezuela for carts, trucks, and trailers. A Dallas firm that exports building materials set up an export office here, on advice and aid from International House, and now sells goods to fifty different firms in Latin America. The list is long.

To this growing trade stream Louisiana and all Dixie add their share.

"Rise of new industries, and more machines on farms, swiftly change the whole pattern of southern life," says former Governor Sam H. Jones, noted authority on Louisiana economics.

"Eli Whitney's cotton gin put whole armies at work in fields. Now the mechanical cotton picker is releasing them again.

"In forestry work, instead of setting out

Freight Trains Board a New Orleans Ship for an Ocean Trip

[illegible] New Orleans [illegible] New York [illegible]

[illegible] by hand, we use a machine that [illegible] in eight hours. [illegible] cane cutters [illegible] operate [illegible] field hands. [illegible] it means the passing of the [illegible] tenant farmer and sharecropper [illegible] lucrative fields.

Machines Create Employment Problem

At the same time [illegible] must be found for all those [illegible] by these labor-saving machines. They don't fit into [illegible] that have to do with [illegible] and foreign trade.

[illegible] farming, into poultry raising and the cattle and meat-packing business, to help our State [illegible] itself. Among all the chickens that will be eaten in New Orleans tonight, probably not a single one was [illegible].

We grow [illegible] all our new [illegible] the actual [illegible] processed [illegible] raw materials that [illegible].

We [illegible] that the [illegible] rubber, [illegible] plastics, [illegible] sweet potatoes and [illegible].

[illegible] grass [illegible] State [illegible] and prosperous [illegible].

An Archeologist Looks at Palestine

By Nelson Glueck*

PALESTINE is the name left by the Philistines [illegible]

Along its southern coastal plain and the shore of the Mediterranean, they established colonies and cities

In Ashkelon, or Ascalon,† and Ashdod (Ezdud) and Ekron (ʿAqir), in Gaza and Gath, this sea people from Greek islands struck deep roots and flourished.

With their chariots of iron, as frightening then as the first tanks were in modern warfare, and with their other advanced martial equipment, the Philistines brought fear upon the land.

Eastward and northward as far as Bethshan (Beʿsan) they surged, to the injury of Israel and the death of King Saul and his sons.

To heap insult upon their enemy, they impaled the royal bodies on the walls of this fortress flanking the approaches to the Jordan Valley.

Strife Since Before Goliath's Time

The Philistine giant, Goliath of Gath, clad in a glistening suit of armor, became a symbol of the awe these invaders inspired.

Palestine then became again what it had previously been, and what it has remained down to our very day, a cockpit of unending conflict.

The struggle between those who held the keys to its gates and those who sought to enter or re-enter its portals has never subsided.

The contenders have been many, but the [illegible] homeless and the hungry have sought the haven of its boundaries. Desert dwellers and the armies of expanding empires have striven and perished for the sake of the plenty and power that seizure of its soil has promised.

The patrimony of Palestine has never spelled peace for long.

And out of the endless upheavals in which nations of the past have spent their substance and themselves in sorry rivalries, naught has survived of the glitter of glory or the panoply of power save the rubble of ruined cities piled hill-high above each other.

These ancient *tells* are monuments to the hearts and hatreds and madness of men.

Even more than men, with their appetites and ambitions, have ideas collided in Palestine. In this crossroads of continents and arena of empires, only the ideas of God and good as first revealed to Israel have proved to be imperishable.

The only thing permanent which has issued from the travail of Palestine is the increased understanding of moral imperatives.

The developing appreciation of God as we know Him today has been its only lasting achievement.

On the Beaches of Ascalon Today

All this was in the back of my mind when I sauntered recently along the beaches of Ascalon and looked at the jumble of ruins reaching down to the shore of the Mediterranean (map, page 742).

Pillars, bricks, and pottery of many widely separated periods litter the landscape.

At the time of Christ, Ascalon was a rich and riotous Roman city, with Greek culture and a sophisticated population of pagans and Jews.

Herod the Great was born there, and it was the residence of his sister, Salome.

He heaped gifts upon Ascalon, as was also his fashion elsewhere, adorning it with fairest fountains, baths, temples, and harbor works constructed in Greek style.

After experiencing various disasters and vicissitudes, from Philistine times onward, Ascalon was lastingly demolished, about seven centuries ago, by the great Moslem warrior, Sultan Baybars.

Since then, sand dunes indifferent to antiquity have drifted over columns, which stick out of the dunes like cannon from a foundered ship. Great blocks of masonry have rolled down the side of the ridge on which the town was built and come to rest at the very edge of the sea or lie beneath the clear waters near the shore (page 740).

In the classical temples of Herodian Ascalon, even as in the earlier Philistine sanctuaries there, primitive and passionate practices of fertility cults prevailed.

A Mermaid Goddess

The historian, Herodotus, informs us of the special place occupied in the pagan pantheon there by Derceto, the fecund goddess with the face of a woman and the body of a fish.

I found a similar goddess in the Nabatean temple of Khirbet et Tannur, in Trans-Jordan, when excavating there on behalf of the Ameri-

* Dr. Glueck, now President of Hebrew Union College, Cincinnati, Ohio, was Director of the American School of Oriental Research, Jerusalem, 1932–33; 1936–40, 1942–45.

† The Ashkelon of Old Testament times later became Ascalon. The later and more familiar spelling is used throughout this article.

Under a Benign Mediterranean Sun Tel Avivians Head for Relaxation at the Seashore

[illegible]

[illegible] Egypt and Persia in [illegible] [illegible]

The Nilotarian trade [illegible] fact, led from Tyre-[illegible] Palestine to Egypt and Asia [illegible] [illegible] Egypt, Rhodes, Italy [illegible]

Ascalon's Glory on Quays Survives

[illegible] Ascalon [illegible] [illegible] Ashdod [illegible]

Bite into the common onion of Ascalon and [illegible] the fate of dead mortals and their [illegible]

[illegible] which is twelve miles [illegible] of Ascalon, we [illegible] Ashdod fishermen [illegible] their nets and [illegible] boats. We [illegible] boats appearing the [illegible]

[illegible] than these, the Philistines [illegible] these vessels.

Here, as in other parts of the coast, the sea [illegible] maintained a foothold and [illegible] Gaza.

For long they bested the [illegible] Israel. [illegible] Shamgar [illegible] their [illegible] the wife of [illegible] Jabin, and [illegible] [illegible] their strength [illegible] [illegible] in their [illegible]

[illegible] the [illegible] Gaza [illegible] which they had [illegible]

[illegible]

AP Wide World

Water Diverted from the Spring of Dan Helps Make the Desert Bloom

A [illegible] of the Jordan's sources [illegible] Israel's irrigation [illegible] Bitter [illegible] such efforts [illegible] water [illegible]

[illegible] captured by eight Sherman dozers. With awe [illegible] saturated from their [illegible] back the Arab to Judean territory at the outskirts of Beth Shemesh (I Samuel [illegible]).

Step [illegible] stones the philistines were forced to [illegible] in the Lydian [illegible] where [illegible] spirit of [illegible] The [illegible] of their culture did not survive the [illegible] to Israel [illegible]

The name Palestine, a modernization of Philistia, whose people is a temporary [illegible] with the process there had brought with them [illegible] the west and the evanescence of all strength based on arms.

On the coast of Gaza I saw a little Arab boy head his donkey and cart with surprise [illegible] dead [illegible] corpses in the desert sand. [illegible] can hardly refrain from wondering what is ultimate end will be [illegible] much of the stuff and [illegible] of history.

From Gaza to Beersheba one is constantly [illegible] with the [illegible] and with the [illegible] desert.

We [illegible] commanded field town of Beersheba, [illegible] the [illegible] and the [illegible] wells [illegible] may possibly have been [illegible] Abraham.

Jewish Pioneers Transform Palestine

The large [illegible] part of the Negeb [illegible] of Beersheba is being [illegible] by Jewish pioneers. They are [illegible] planting [illegible] and [illegible] this area [illegible] never [illegible] settled.

[illegible] Jewish colonists, who grow [illegible] effectiveness of their service, have achieved miracles of transformation in the [illegible] other parts of Palestine.*

* [illegible] Mission [illegible] Today [illegible] Israel [illegible] Mission [illegible] Mission Board, Nashville, Tenn. Wilkins, March, 1944

Majority report of United Nations Special Committee on Palestine recommended that Palestine be divided into an Arab State (shown in dark gray) and a Jewish State (shown in light gray). The area of Jerusalem would be administered by an International Trusteeship.

Russell [illegible] which [illegible] and have been [illegible] and compelled to [illegible] from [illegible] where [illegible] cultivated before. Wastelands are being [illegible] to productive [illegible].

And at [illegible] the [illegible] political [illegible] can be [illegible] and the dream of [illegible] from the [illegible] of the [illegible] to the [illegible], the desert there will become a fruitful [illegible] land. The scheme is [illegible] physically feasible.*

The [illegible] that Hadassah [illegible] the Dead Sea, a short distance north of the great salt [illegible] of Palestine [illegible], has demonstrated how the apparently impossible can be accomplished.

[illegible] the water of the Jordan River, still sweet and [illegible] up [illegible] the [illegible] of its disappearance into the orbital depths of the Dead Sea, is diverted over [illegible] of [illegible] soil in the lowest reaches of the Jordan Valley (see [illegible]).

Megiddo's Ruins Are Signposts to History of the Remote Past

In this [illegible] [illegible] Between them [illegible] animal—a [illegible] The [illegible] vessels [illegible] more powerful.

This process is repeated again and again till a sufficient quantity of minerals has been leached out and the sweetened soil can sustain plant life.

On the basis of such soil, the young Jewish settlers of Bet Hadarava are planting and harvesting lush crops, where previously no land was tilled or settlement of any kind existed.

Glutinous orange groves, with ownership almost equally divided between Arabs and Jews, delight the eye and appeal to [illegible] of the coast of Palestine. The [illegible] Jaffas (Shamutis) and other types of oranges [illegible] one of the chief exports of the country.

Oranges for Sale—at Damascus Gate

In the orange season, which lasts almost six months, I love to walk from my house at the American School of Oriental Research [illegible] to the [illegible] Damascus Gate, and purchase oranges from the big piles for sale at the opposite corner.

Orange shops [illegible] in the neighborhoods of the adjacent Arab and Jewish cities of Jaffa and Tel Aviv and are [illegible] with oranges for [illegible].

* See "The Geography of the Jordan," by Nelson Glueck, NATIONAL GEOGRAPHIC MAGAZINE, [illegible] 1944.

Neat Nubbies in Mens Lowers a Candle to Show the Depth of Jacob's Well

[illegible]

From Haifa larger quantities are exported. Haifa harbor, equipped with extensive artificial breakwaters, is the largest and best along the entire coast of Palestine.

Because of the conspicuous lack of natural harbors, it is no wonder that in the past Palestine failed to develop as a maritime power, that role being assumed by Phoenicia to the north.

Haifa is a beautifully modern city, whose residential sections climb up to and over the top of Mount Carmel.

Pipe Lines Bring Oil to Haifa

A great pipe line brings oil from Iraq to Haifa, where much of it is refined before being pumped into tankers for shipment to England. A parallel pipe line is being laid to bring much larger quantities of oil from the eastern deserts.

With its pivotal importance for oil and industry, for commerce and imperial strategy, Haifa is bound to grow mightily, unless political calamities retard its development.

Haifa is a cultured and cosmopolitan city. Huge retorts of a gasoline refining plant vie for attention, for instance, with an exquisite Bahai garden.

The cooperation of Jews and Arabs in Haifa is an earnest of conditions which could exist in all of Palestine and make unnecessary the partition of this tiny fragment of a country.

The view from Mount Carmel over the white limestone city and the deep-blue waters of the Mediterranean has always made me want to own a home there.

While rock was being blasted for the breakwaters in Haifa harbor, prehistoric caves were discovered on the western slope of Mount Carmel.

In these caves were found skeletons of Palestine's earliest known humans, of a hitherto-unknown type, famous now as the Palestine Man. He lived 50,000 or more years ago.

Not far away, on the shore of the Mediterranean, are the massive ruins of the Crusader castle of 'Athlit. It was built, completed, and destroyed during the 13th century after Christ. About eight miles south of Haifa it stands on a promontory projecting into the sea, with wonderful beaches on three sides.

Among the ruins, composed of remnants of massive walls, huge subterranean vaults, and great ruined towers, a few Arab squatters live in squalid huts.

Near by is a prison camp and an immigrants' reception center. A small Jewish village, too, is located in this area.

Less than 15 miles south of 'Athlit lie the ruins of the great Roman and Crusader city of Caesarea, built originally by Herod the Great in 25 B. C. as the most important port of Palestine.

Another Caesarea was built by Herod Philip, a son of Herod the Great, at the Baniyas source of the Jordan River. This city was called Caesarea Philippi (Baniyas) to distinguish it from the other, which became known as Caesarea Maritima.

Like the Crusaders after them, and the Egyptians and others before them, the Jews under Herod the Great and his sons fashioned cities as Nature fashioned mountains. They were built to last forever, and have indeed survived for millenniums.

The best example of what such cities looked like is furnished by the remains of the Roman city of Gerasa (Jerash) in Trans-Jordan, with its theaters, temples, forum, stadium, and triumphal gateway.

In this east was Caesarea Maritima created. Of great beauty, size, and importance in its beginnings, it was a city also of massive dimensions and crucial strategic value at its end in the Crusader period. It was destroyed by the Moslems A. D. 1291.

Every town that Herod the Great touched he transformed into the shining semblance of the Hellenistic-Roman cities he knew and loved, outside the domain of his own dour country.

Over the great hill site of Samaria (Sebaste), where Omri had built the capital of Israel, Herod the Great, with the magic wand of his energy, wealth, and power, called into being a magnificent metropolis.

Herod called the city Sebaste. That was the Greek equivalent of Augustus, the emperor under whose authority he reigned at the time. He had named Caesarea in honor of that same Caesar Augustus.

Holy City Beyond Compare

Herod's passion for building resulted in his changing the very aspect of Jerusalem. Under his hands it became a majestic Greco-Roman adornment to his domain.

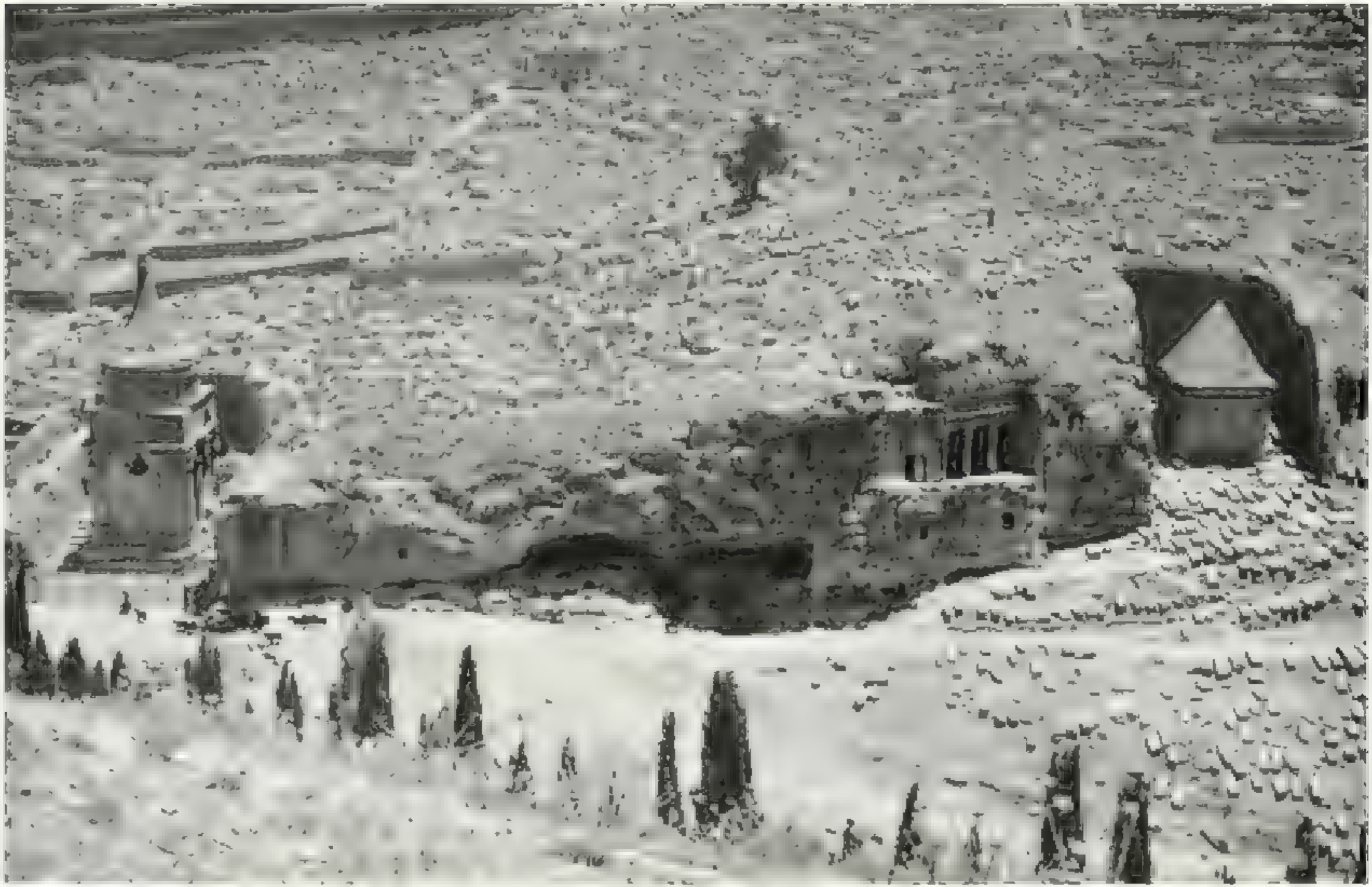
His crowning achievement there was the construction of the third Temple. Architecturally, it could easily have served as a sanctuary for pagan gods. The golden eagle he had set above its great gate served to accentuate that similarity.

This temple was not, however, actually completed until A. D. 63-64. It was destroyed by the Romans six years later, when they succeeded in putting down the fierce Jewish rebellion that flamed up against them.

The temple was never rebuilt, but the massive stones of the walls of the temple area can still be seen. They appear in the foundations

Strangely Eroded Blocks of Ancient Masonry Stud Aqaba's Sands, Where the Philistines Swarmed Ashore

Centuries Before Christ, Nabataeans Worshiped in Trans-Jordan's Temple of Khirbet et Tannur



Biblical History Comes Alive in Jerusalem's Tourist-strewn Kidron Valley

From the Mount of Olives [illegible] Temple Mount [illegible] Dome of the Rock [illegible] Dome of Moses [illegible] Kidron Valley [illegible]

of the 16th-century wall, which at present surrounds the Old City of Jerusalem.

> If I forget thee, O Jerusalem, let my right hand forget her skill. Let my tongue cleave to the roof of my mouth, if I remember thee not, if I prefer not Jerusalem above my chief joy (Psalm 137: 5, 6).

City of infinite beauty, built in antiquity and ageless, Jerusalem is without compare. It combines the gleam and glare of the new with the patina and poise of the past, and is full of contrast and color.

Exposed to the perplexities and perils of a turbulent and tragic present, it has endured and become strong with the experiences of immortal millennia.

Still the chief seat of government in Palestine as it already was in the days of David of old, Jerusalem remains the pivotal place of the Near East and the capital of the conscience of much of mankind.

The grim barriers of barbed wire which block its paths today, the bullets and bombs evoked by passion and despair, can still not destroy the hopes for peace in Zion, whence the word of God went forth.

Stand on the summit of Mount Scopus and see the extraordinary city below, as fair a sight as can be seen on the face of the earth.

Or turn eastward from your point of vantage and let your gaze sweep over the many-hued wastes of the Wilderness of Judah, pause over the deep blue of the lowest sea, known as the Salt, or Dead, Sea, and come to rest on the purplish mountains of Moab, where Moses once stood and looked westward, never to cross over to the land of his longing.

Amazing Mosaic of Old and New

Now descend and wander through the Suq of the Old City, with its bedlam of sounds and full-bodied smells, where donkeys and sometimes camels contest with you for footing in the twisting and aromatic alleys.

In the modern sections of the city, too, you may be bewildered by a babel of languages, with Hebrew, Arabic, and English prevailing.

Bookstores, largely Jewish, display a range of books which pays high tribute to the cultural interests of the population.

Next to a modern hotel stands a windmill, long unused. Old olive groves still grace quiet corners.

Synagogues, churches, and mosques of charm, and in part of haunting beauty, abound in this sanctuary of Judaism and Christianity, which is also one of the sacred cities of Islam.

The Wailing Wall and the Garden of Gethsemane, the Mosque of Omar and the magnificent Government (Rockefeller) Archeological Museum, the gates of the Old City and the house-studded hills of the New, the vistas of the Jordan Valley and the highlands of Trans-Jordan beyond—these and more are part of the amazing mosaic which makes up the picture of Jerusalem.

It is a city of clarity, yet of sharp contradictions. There is a tang in its atmosphere, evoked out of its background and its promise, that makes life in Jerusalem, as indeed in all of Palestine, a deeply disturbing, frequently dangerous, and yet wholly entrancing spiritual and physical adventure.

Most of the water for Jerusalem is pumped up to its 2,500-foot-high mountain position from the coastal plain. The headwaters of the 'Aufa River, which flows past the north end of Tel Aviv into the Mediterranean Sea, are employed in part for this purpose.

Close by the springs which create the river, some ten miles northeast of Jaffa, is a hillock topped now by the ruins of a castle, with the green of a government tree nursery in the fields below setting off its time-stained gray. This is the site of Antipatris, built by Herod the Great in the name of his father, Antipater.

Later Crusaders and much earlier Canaanites exploited the city's strategic importance. Excavations have exposed pottery turned on a wheel and then baked in a kiln to enduring perfection almost 5,000 years ago.

Just below the modern Hebrew University and the magnificent Hadassah-Rothschild Hospital on Mount Scopus, both of which are open to people of all faiths, bask Arab villages.

Superficially, they seem unchanged by the political, cultural, and economic revolutions taking place in Palestine. Actually, they and their like are being influenced for good and ill by the impacts of Western civilization.

Starting out from Mount Scopus, we wind through the the hills of Judah for a few miles to the Arab village of 'Anata, which is probably the site of Biblical Anathoth, the birthplace of the prophet Jeremiah.

'Anata can be reached by a rickety bus today. It has a Diesel engine for its mill now. The days of grinding grain or pressing olives by hand are largely gone.

Monasteries Cling to Canyon Sides

It is no longer true, if indeed it ever was, that "East is East and West is West, and never the twain shall meet." In the oil of the East and the processes and products of the West, let alone the interchange of not easily measurable influences, there is union now. It existed long ago in the continuous cross-fertilization of endless caravans of expanding cultures.

[illegible]

Bones and Pottery Litter a Bronze Age Tomb at Megiddo, Called "Armageddon" in Scriptural Prophecy

[illegible] At Megiddo [illegible] [illegible] Field Marshal Allenby [illegible] Megiddo.

Nowhere are the [illegible] and [illegible] of the present more [illegible] treated than in the Greek Orthodox [illegible] of the monastery of St. Saba (page 756). It clings to [illegible] in the Wilderness of Judaea, [illegible] miles southeast of Jerusalem.

Founded in the 5th century after Christ by St. Saba, [illegible] who was believed to have [illegible] the monastery [illegible] during the [illegible] centuries. [illegible]

A [illegible] through the [illegible] buildings [illegible] seemed to grow out of the cliff [illegible] tomb.

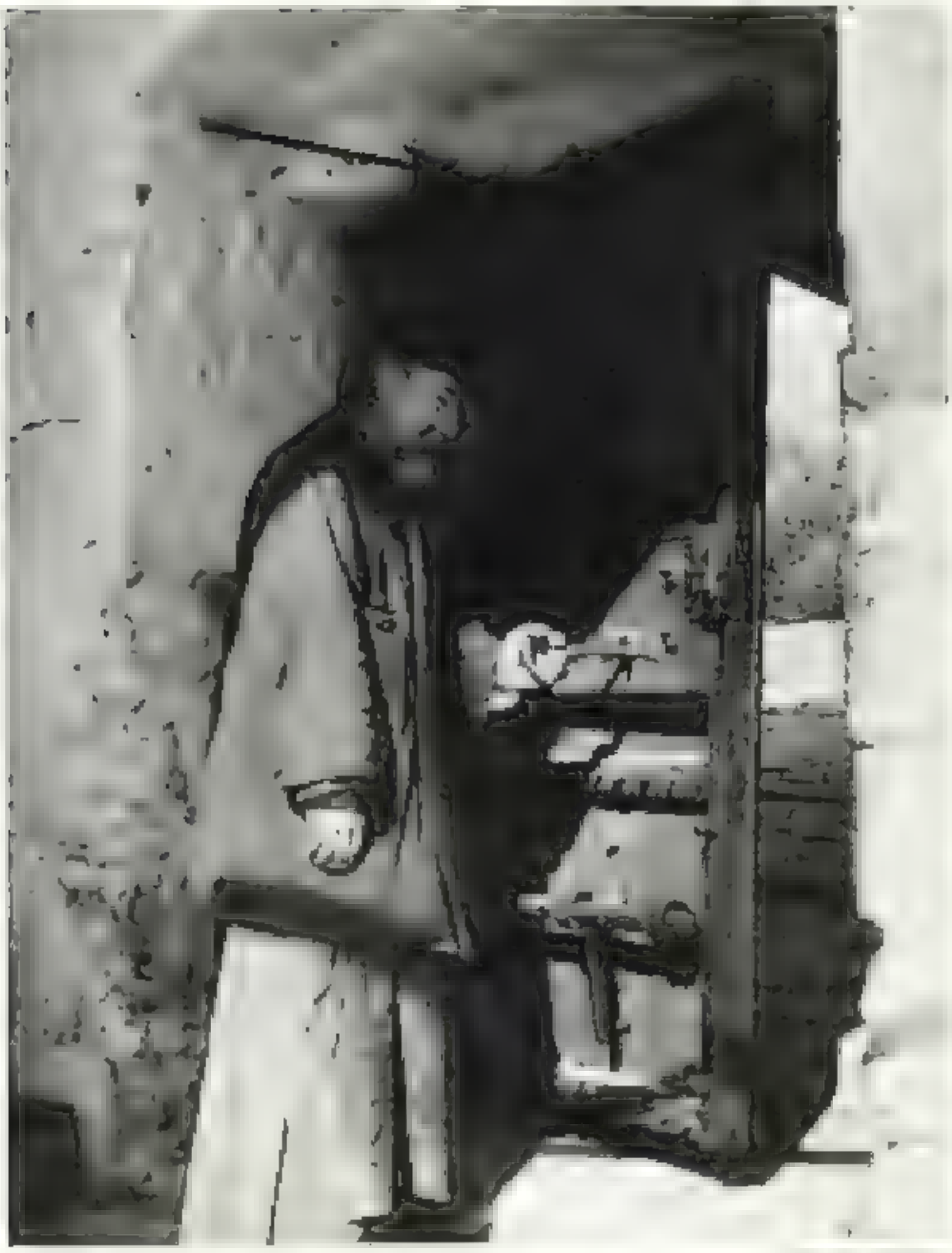
He told us the tale of the [illegible] St. Saba sepul- [illegible] with the [illegible] who [illegible] it and [illegible] with it. We were shown the cave [illegible].

A single palm tree [illegible] the time of St. Saba [illegible]. Its dates are supposed to [illegible].

On the opposite side of the canyon is a solitary tower where women may rest. Within the precincts of the monastery women, the [illegible].

I had a long conversation with the [illegible]. He had been [illegible] with their ideas of God.

At Nablus, in north-central Palestine, where [illegible] Samaritans [illegible] I met a Samaritan



Between Two Worlds Swings This Massive Iron Door

[illegible] Monastery of St. Saba [illegible] Women [illegible]

[illegible] the black depth [illegible] of the [illegible]

Jericho an Emerald Oasis

[illegible] road [illegible] down [illegible] the Jordan Valley. [illegible] Jericho. The gardens [illegible] irrigated from [illegible] defy the [illegible] of its surroundings [illegible] depth.

Little wonder [illegible] Joshua [illegible] and that Herod [illegible] Cleopatra [illegible]

Still attached [illegible] below the top of the Mount of Temptation [illegible] Arabic [illegible]

On this height [illegible] the Devil tempted Jesus with the [illegible]

[illegible] was raised and [illegible] in a Moslem surrounding.

He and the [illegible] of his fellows [illegible] the Passover on Mount Gerizim [illegible] Over many centuries [illegible] these Samaritans have clung to the traditions of their fathers.*

Similar to the monastery of St. Saba is that of St. George, clinging perilously to the north wall of the [illegible] Wadi Qilt.

A [illegible] the monastery [illegible] a

Wherever one goes in Palestine, the past [illegible] itself [illegible] with the present, and [illegible] the promise of tomorrow.

[illegible] we stopped at [illegible] a modern Jewish settlement and a [illegible] center [illegible] the town. In an [illegible]

At the [illegible] are the remains of a [illegible] mill [illegible]

---

*See "[illegible] Samaritans [illegible] the Passover on Sacred Mount Gerizim," by John D. Whiting, National Geographic Magazine, January, 1920.

[illegible] of El Ahwat [illegible] new city [illegible] the remains of the [illegible] destroyed one [illegible] found [illegible]

Stone Coffins Make Building Blocks

In the Middle Ages, on top of this mound was built a fortress. Its chief building blocks were stolen from a Byzantine cemetery of about the 5th century after Christ. These massive sarcophagi were placed [illegible] to form the [illegible] of the fortress.

Thus, literally, the [illegible] of one age [illegible] the needs of another. Furthermore, in the debris around the foundations of this [illegible] we found pottery [illegible] from the Middle Ages to the middle of the 5th century.

A few miles south of Megiddo is the Mediterranean, the Valley of Megiddo, [illegible] known as Armageddon. The kings of the world were to come together there on the day of divine wrath like a [illegible] to fight against the [illegible] of the Lord. [illegible] the road [illegible] which leads from the Mediterranean [illegible] to Mesopotamia.

We found, at the entrance of the valley, a Sumerian [illegible] the earliest Canaanite temple excavated by the Oriental Institute of the University of Chicago.

From the summit of Megiddo one can see far over the plain of Esdraelon. Nazareth is visible on its hill.

Jews and Arabs Study Agriculture

In the distance to the northeast, the hump of Mount Tabor rises high above the fertile valley at its base. Tradition localizes the transfiguration of Jesus on its top.

She Holds an Armful of Palestine's Future

Young [illegible] [illegible] a fat [illegible] for [illegible] the [illegible] [illegible] and [illegible] [illegible]

In [illegible] we were taking to Tibeh [illegible] the Kadoorie Agricultural School for Jews. This and another one for Arabs at Tulkarm were established through [illegible] for the advancement of [illegible] in Palestine. Kadoorie [illegible] less [illegible]

An Arab [illegible] was [illegible] the [illegible] of the school [illegible] to the same type of primitive [illegible] plows the ancients had used. He [illegible] if they were [illegible] than his own.

[illegible]

On the contrary I had [illegible], because [illegible] the [illegible] of the [illegible] shortage [illegible]

A Jew-Arab Feast Symbolizes Hope of a Peaceful Palestine

[illegible] and a Jewish settlement [illegible] Tents celebrate the opening of a new Jewish [illegible] Nahalal. The [illegible] in [illegible] and bombers capped [illegible] A rule of Turkish rulers Palestine [illegible]

the sun, a crucial battle was fought between the Crusaders and the soldiers of Saladin. The Christian army was annihilated, and the power of Islam prevailed in Palestine.* Christianity, however, like Judaism, could not be conquered.

In Biblical times, the mountain Hattin was probably the site of Madon, but it was occupied long before then, too. On the western bench of the raised plateau, below the wall of the massive Bronze Age tower, I found great Acheulean axes of flint, which other prehistoric men more than 100,000 years ago tilled the soil and chipped for each other.

From the top of Hattin we could look down upon the fair fields of Galilee and across the Lake. Listen to the words of Josephus, a Jewish nobleman who [illegible] [illegible] Jesus:

[illegible]

[illegible]

Many new white limestone buildings are enhancing the originally somber city of Tiberias. Built by Herod Antipas, son of Herod the Great, on the western shore of the Sea of Galilee.

The natural beauties of this lovely lake and its lowland shore line are dwarfed by its rebirth [illegible], as the holy past towers above the uncertain present throughout these old new Bible lands.

It's Dawn on the Desert, and Up Goes the Flag of the Arab Legion [illegible] Transjordan [illegible] Lost Lives at Tobruk in North Africa

The King of Transjordan, His Highness the Amir Abdullah, Discusses Inter-Arab Questions with Ghabbi Pasha

[illegible]

The Arab Legion Has MPs, Too!

Pride of This Mounted Police Sergeant Is His Arab Mare

Scratches Are Healed and More than a Good Work

[illegible]

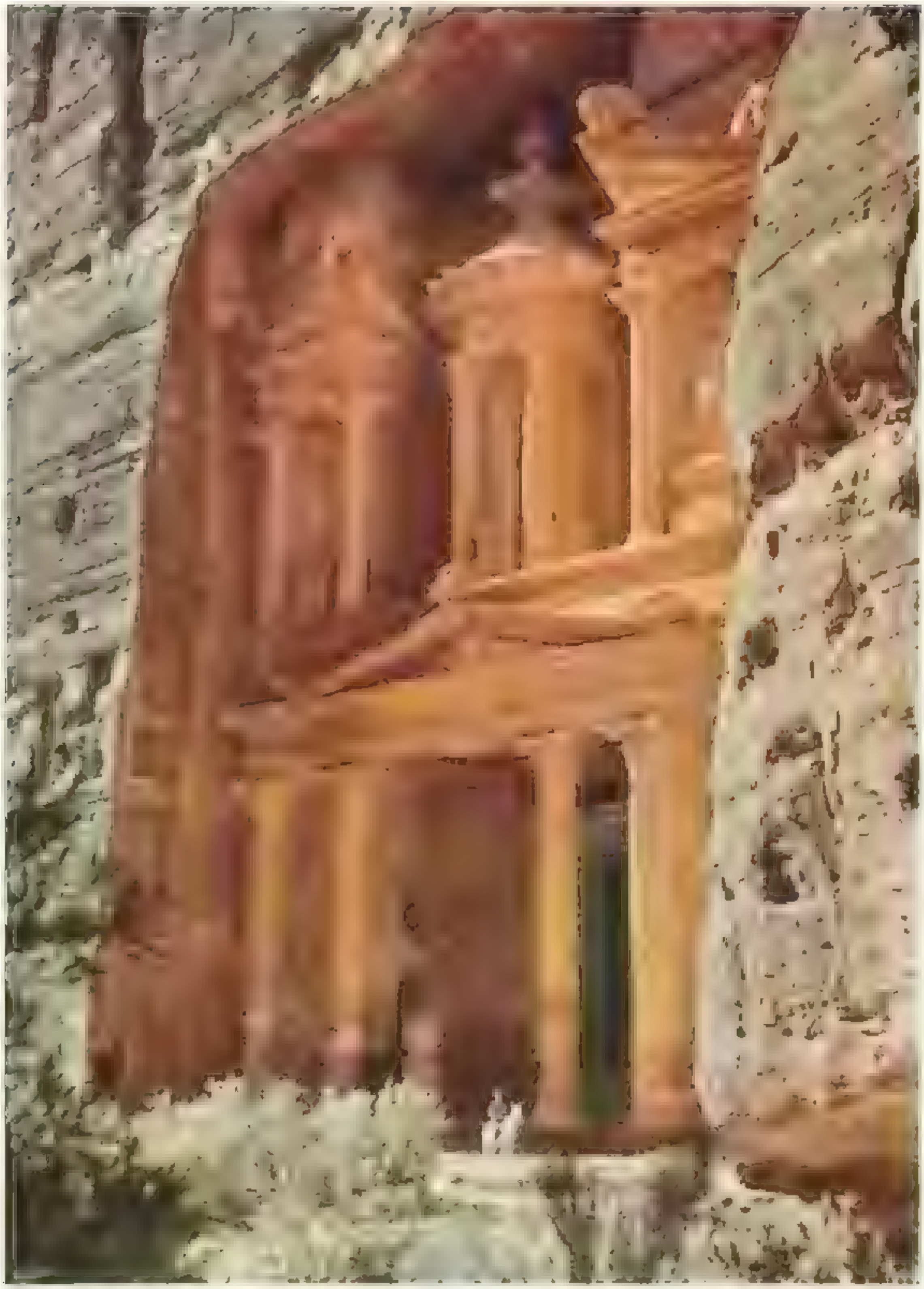
Mu[illegible] Al-Dawsari Displays Her Rescued Dog

[illegible]

Reproduced by Tuck's Hospitality and Generosity. From Lord Rodney's Cruise in Eastern and Equatorial Waters

Sheiks of the Wealthy Mainli Bedouins Relax on Rugs and Soft Cushions Before Their Tent

[illegible]



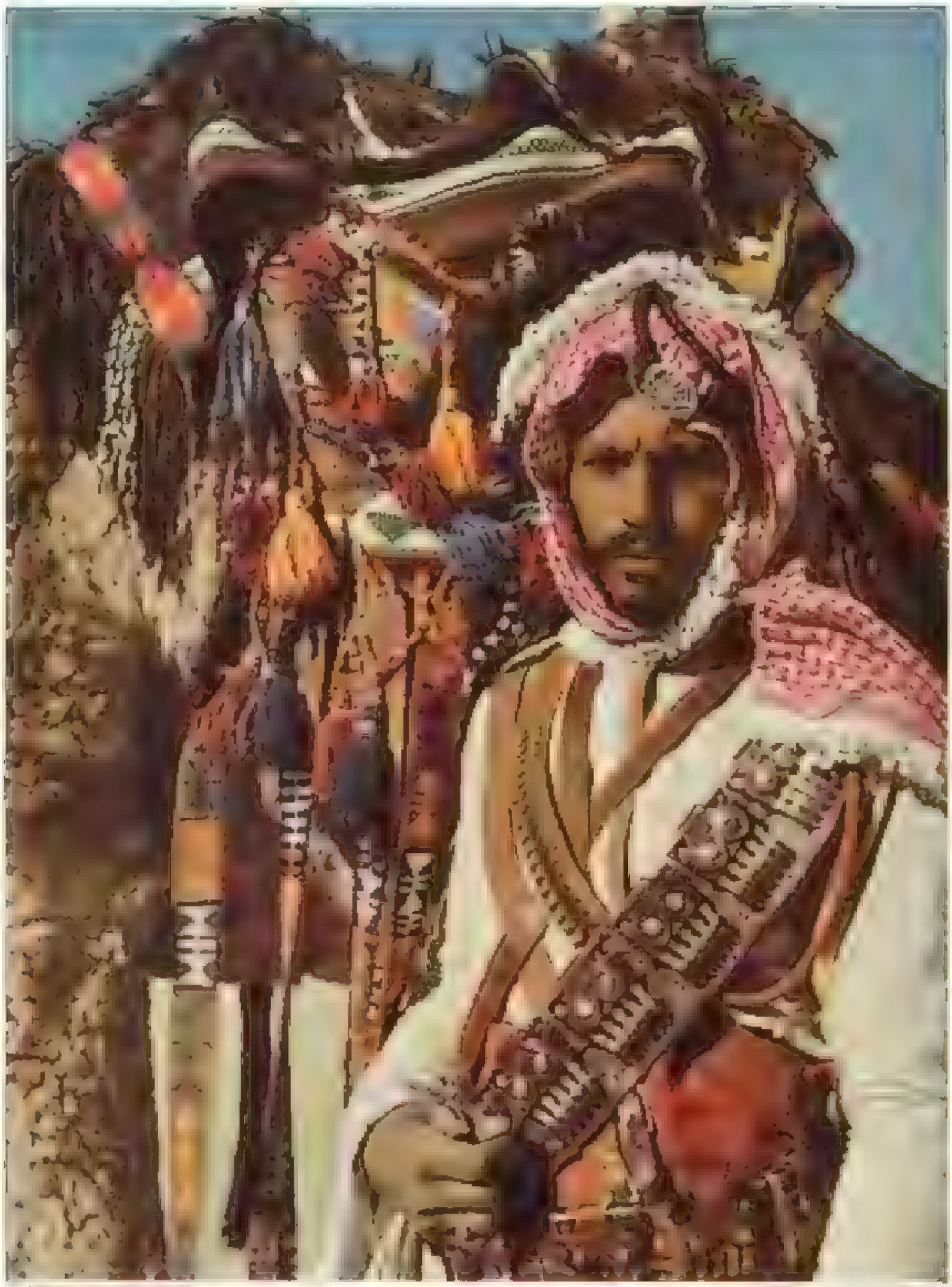
Cameron H. Kinzie, "The Treasure," Reflections of Alvin Lucier

[illegible]

Father and Son Dwell in This Cliff of Peru, One of the Ancient Tombs of Paracas

[illegible] Blade Cells Degenerates [illegible] Thus Invades at [illegible]

Their Blood Is Circulation, But They Are Loyal Subjects of the Arab Kingdom



A Member of the Antirader Desert Patrol Is a Perambulating Arsenal

[illegible]

A Great Detachment of the Ninth Legion Passes on an Aqueduct Built by Pacuvius during Romans at Petra

Archer Forbes Riveted in Bewildering Chaos of Variegated Rock Walls Which Guarded Petra

High on a Mountain Spur, Between the Dead Sea and the Desert Towers the Old Crusader Castle of El Kerak

[illegible]

Trained as Readily as Are Their Masters, These Parade Camels Obey the Order "Heads Down"

Haunting the Greek Villager Is the Constant Specter of Fuel Scarcity

Homeward bound from the fields, this girl leads a donkey and a pony laden with pr[illegible] cooking and heating. Even green oak along the roadsides is cut. In the Vouraikos River area [illegible]

[illegible] the goats and sheep has also reduced most of the original hardwood forest to brush a foot or two in height.

Most of the maples, hackberry, myrtle, and other [illegible] by the hungry animals. Only the harsh, [illegible] pear tree remain to protect the rocky soil from the driving winter rains.

Fuel Seekers Comb Countryside

Under such conditions, the worry of being without fuel is a constant specter that walks beside every villager. Everything else will [illegible] is carefully gathered.

While the men and women are in the fields, the children comb the surrounding countryside [illegible] Even the green oak brush along [illegible] is cut and placed home to cook the evening meal or to heat the little stone houses.

In months of travel in Greece I never saw a donkey or the small Greek pony on its way to the village without a load on its back. If [illegible] sticks or brush for fuel.

[illegible] the wheat is harvested and threshed, almost the whole village moves up into the canyons to the fir timber to get out the winter fuel supply. While the men and older boys fell the trees, the women and children cut them up in lengths short enough to be loaded on the donkeys.

[illegible] over several miles of mountain trail, all so heavily loaded that it seems only their ears protrude.

Home Weaving, a Lost Art in Many Countries, Is an Everyday Task in Greece

[illegible] Each home [illegible] Dr. Paul's UNRRA survey mission found Greek [illegible]

It would take time for the mountain villagers to restore their forests to the point where they would have [illegible] could do it very [illegible] It would be to set aside a few acres [illegible] and keep them from being [illegible] and goats.

[illegible] protection the oak brush would [illegible] grow to [illegible] and produce several times the amount of [illegible] If there were two or three such areas for each village and the cutting alternated between them, in a few years there would be ample fuel for all.

Ills of Agriculture Are Fundamental

Many of Greece's real problems, poor health and poverty with all their attendant evils, are traceable to the ills of her agriculture.

Malaria would largely disappear if the swamplands were drained and the upland farm lands were better managed.

A diet of bread should not be necessary where such a variety of fruits and vegetables can be grown under irrigation.

Cheese, milk, and other dairy products should be plentiful in a country where irrigated pastures can equal any in the world.

Widespread poverty from farming eroded lands should not be necessary where a few simple conservation practices, generally applied, would double or [illegible] of agricultural crops.

With much of the country still [illegible] forest land, there is no reason to [illegible]

These are the challenging problems which confront Greece. Unless something is done about them, the health of most of the people will continue to be poor and living standards low, regardless of how much is spent to modernize and repair her industries and public utilities.[1]

[1] [illegible] general articles on Greece, see the "Cumulative Index to the NATIONAL GEOGRAPHIC MAGAZINE" [illegible]

Carnival in San Antonio

By Mason Sutherland

With Illustrations by Staff Photographer J. Baylor Roberts

SINCE its foundation as a Spanish colonial outpost San Antonio has been the Southwest's capital of carnival. Here people from the Deep South, the West, and Mexico have met to have fun.

Under the flags of Spain, Mexico, Texas, the Union, and the Confederacy, San Antonio has lured adventure seekers of many lands.

Once the rules allowed cowboys to drive "well-behaved" ponies up to the bar of the Buckhorn Saloon. Now the Buckhorn is a curio shop (page 813), and the other bars are beer parlors or package stores, but carnival continues.

Each year in April the city celebrates the week-long Fiesta de San Jacinto, commemorating the battle in which Texas won her independence (Plates VI and VII).

Nothing but his city's flash floods seems to surprise the San Antonian. For tolerance and urbanity he yields nothing to New Yorkers or San Franciscans.

He may be a retired general, an oil baron, one of the cattle gentry, a descendant of Spanish hidalgos, a German brewer, or an obscure Joe Doaks. No matter; on balmy evenings he is out in shirt sleeves promenading Houston, Commerce, or St. Mary's Street, or Main Plaza. Everybody I ever knew in San Antonio had a good time.

Beautiful but Treacherous River

To see San Antonio to good advantage visit its river by moonlight. Here is the Venice of the Texas plains. Staircases from downtown bridges lead to a canyon 20 feet below street level. Soldiers on grassy slopes and rustic benches woo their girls beneath the misty, fairyland glow of floodlights concealed in [illegible]. Other couples go riding on a con[illegible] flat-bottomed pleasure boats. Gondolier-propelled like Venetian canalboats, these parade below busy bridges (page 837).

To know San Antonio, know the river that cradled the city. It provides no electric power, no tall ships sail into docks. Barely 30 feet wide and two feet deep, it is crooked and treacherous. Whether it brings flood or visitors, the city loves its river.

Twice within memory the San Antonio River has caught a sleeping city [illegible]. A major disaster such as that of September, 1921, was partly prevented in the flood of September, 1946, by Olmos Dam, a barricade built in the intervening years, and by a cutoff channel by-passing the business area's "big bend."

The river bubbles up from springs on the outskirts of the city and its waters flow 150 miles to the Gulf.

Coiling through the city, the stream takes 13 miles to travel seven. In the business district it snakes around a three-quarter mile loop only three blocks short of being a complete square. The downtown visitor confronts its bends wherever he goes. Indians who noted its dizzy course called the river "Drunken Old Man Going Home at Night."

Tall Trees Beside Skyscrapers

Having left San Antonio in 1923, I remembered the river as a sluggish, slimy green ditch. Upon my return recently I found it transformed by the beautification project of 1939.

The river's face lifters dredged out rusting wagon wheels, cannon balls, and pistols. Then they shored up the banks with concrete walls and laid out flower beds and flagstone walks.

Today every vista shows a pleasing curve; shady walks weave among old trees. Gnarled figs, weeping willows, and palms shade a park a mile and a quarter long. Tall cypresses and pecans, soaring from sunken gardens, arch the river. Retama, a spiny desert shrub, explodes in yellow blooms.

I went down to the river one starlit morning when mockingbirds saluted the dawn. Beyond the landscaped portion a footpath led me into a jungle lining residential areas. Carrizo, a bamboo-like grass, grew ten feet high. Mossy water growths waved sea-green beards.

Occasionally a mansion spread a clipped lawn to the bank. Elsewhere the jungle maintained an enclave within the city. Only factory whistles and the rumble of board bridges broke the wilderness spell.

The Alamo, Shrine of Texas Heroes

San Antonio grew up along its river; beside it the Spanish padres founded five missions.

Yanaguana, the Indian village that preceded San Antonio, was already old on May 1, 1718, when Father Antonio de San Buenaventura Olivares established Mission San Antonio de Valero on the site of the present Alamo. Four days later a Spanish military expedition founded the neighboring Villa de Bejar. From

Weather-beaten Texas Gentlemen Dress for Comfort

[illegible] San Antonio, users of cattle, sheep, goats, and hogs gather at the Live Stock Exchange [illegible] Stock Yards. Here have three favorite topics: the [illegible] the prevailing livestock prices, and the hardships experienced in old-time days [illegible] ruled a town by the size, condition, and watering facilities of its stock pens (pages [illegible])

[illegible] San Antonio, secularized in 1793 [illegible] converted into a fort, no longer bears its [illegible] name. For a century and a half it has been known simply as the Alamo, a name [illegible] to the *álamos* (cottonwoods) which [illegible]

[illegible] which [illegible]

[illegible] the shadow of [illegible] Arts Building (Plate [illegible]) [illegible] style, and [illegible] Area Plaza. The partly [illegible] of the old mission.

[illegible] Texas [illegible] Santa Anna [illegible] 4,000 [illegible] accept his demand [illegible]

On the morning of March 6, 1836, a dead-[illegible] strang came from Santa Anna's camp: it was the *degüello*, a bugle call meaning no quarter. As the outer walls were stormed, the defenders fell back within the inner fort. A Mexican sergeant described the [illegible]

"The attack . . . was at short range—muzzle to muzzle, hand to hand. . . . The crash of firearms, the shouts of defiance, the cries of the wounded and [illegible] [illegible] The Texans [illegible] desperately [illegible]

After the [illegible] smoke had cleared [illegible] Mexicans had [illegible] Foreign [illegible] included [illegible] [illegible] cremated; the funeral pyres [illegible] for two days. [illegible] children [illegible] were spared.

No wonder the Texans [illegible] the Alamo [illegible]

Texas Avenged; Santa Anna Vanquished

Forty-six days after the battle the Texas army shouted, "Remember the Alamo!" With this battle cry Gen. Sam Houston, on April 21, defeated Santa Anna on the San Jacinto River, assuring Texas of independence.

Gone Are Cowboys Who Drove Ponies Up to the Bar; the Buckhorn's Now a Curio Store

[illegible] San Antonio [illegible] Martin Brandis, son of [illegible] armed his shell, its tail curled as a handle. [illegible] than eight feet. A full-grown gorilla. [illegible] from 12 [illegible]

Around the Alamo heroes, these names stand [illegible]

[illegible] Bowie, Travis [illegible] Texan [illegible] Mexicans [illegible]

[illegible]

[illegible] Alamo [illegible] from Latin America [illegible] Mexico, the Alamo's customs [illegible] Mexicans [illegible] remembering this was once a church. They seem to hear Dr. Ortiz.

Her words reminded me of [illegible] I [illegible] across in 1921, when I was a newspaper reporter in San Antonio. The people [illegible] were preparing a pageant of [illegible] history. Not a Mexican [illegible] would [illegible] to play Santa Anna, [illegible] were the [illegible] Texan [illegible]

Missions Relics of Colonial Spain

South along the river stand other old missions, one within the city limits, three around. Once self-contained communities, they had their own farms, workshops, barracks, [illegible] and chapels. [illegible] work and [illegible] them. Works of beauty [illegible] were built with simple tools by Indian artisans taught by [illegible]

[illegible] Indians [illegible] plows [illegible] land under the ranks. In 1794 [illegible] Spain and the [illegible] Indians took over the lands. Walls and buildings fell into ruin.

With few exceptions, they are now restored.

My guide to the missions was Josephina Niggli, Mexico-born, San Antonio-reared author of *Mexican Village*.

We started our tour at San José. Richest, most influential, and best fortified, it was the "Queen of the Missions." It was founded in 1720, two years after San Antonio was born.

San José's walls contain its soldiers' and Indians' cells. In the church hang three Italian paintings, reputed gifts from the King of Spain. Its exterior is celebrated for its so-called Rose Window, a masterpiece of sculpture copied by hundreds of artists. Pedro Huizar, whose ancestors helped create the Alhambra at Granada, did the carving.

For five years he gave his skill to this small space. Legends surround his name; their essence is that, disappointed in romance, he lavished all his love on the exquisite window.

So successful was San José that in 1731 it attracted three neighbors—Spanish missions fleeing east Texas in fear of French encroachment. Two survive as living relics.

One is Espada. Here Miss Niggli and I found 45 families dwelling in the simplicity of their ancestors 200 years ago. Their children attend school in a barrack of the old fort. Bullet scars on a tower are pointed out as signs of a forgotten Indian raid. In the mission chapel the church still conducts masses. Primitive statues are hand-carved from wood; glass eyes and flexible joints lend realism (Plate V).

San Juan Capistrano, left almost as it was when the padres abandoned it, offers an authentic picture of the mission plan in 1731.

Only its walls remain as Indians and soldiers left them, save for time's disrepair. In one cell we saw vegetables growing out of a dirt floor. Our intrusion disturbed wasps nesting on walls. Mourning doves seemed to cry over the desolation. San Juan, too, is surrounded by descendants of its original settlers.

Mission Concepción, closest to midtown, is best preserved of the four; yet we found its frescoes, executed by the monks with Indians' pulverized stone dyes, fading (Plate IV).

The Slum That Became a Museum

From Espada, outermost mission, a series of dry irrigation ditches has been traced to an old dam site on the river near a venerable section of midtown San Antonio. This community is still known by its Spanish name—La Villita (Little Town). It is a good example of how a city can transform an eyesore into an asset (Plate VIII).

Spain founded Little Town around 1722 to house her soldiers and Indian wards. In turn, Germans, Poles, and Frenchmen occupied it. Finally the fine adobe buildings became slums.

Little Town was a bootleg joint. An old well revealed a deep shelf for hiding bottles. Other wells yielded arrowheads, ox jawbones, and six-inch Spanish kegs. I saw these trinkets in La Villita's museum. A general's leg wore a rusted spur. "He died with his spurs on," said a placard.

Today the old houses have been restored as they were two centuries ago (page 826). One is occupied by the manager, Hamilton Magruder, and his wife. Said she:

"We never lived in so comfortable a house. You have no idea how a thick adobe wall can moderate the weather. This house is 15 degrees cooler in summer and 25 degrees warmer in winter."

A few steps away, the municipal outdoor theater spans the river. On one bank is the stage; on the other rise grassy tiers, seating nearly a thousand (page 829).

Once, I was told, when everyone stood for the "Star-Spangled Banner," two soldiers approached in a canoe. They, too, stood up and, teetering precariously, drifted between orchestra and audience. Everyone but the musicians held his breath.

Army Days and Army Ways

Soldiers! During wartime San Antonio appeared a uniformed city. On Saturday nights civilians could scarcely look into downtown restaurants, there were so many soldiers. On an average day the city's eleven military installations contained 100,000 troops. As their families settled down beside them, San Antonio's prewar population, 254,000, rose an estimated 100,000.

Soldiers were not a passing phenomenon. Since the day in 1718 when Don Martín de Alarcón marched the first Spanish garrison into Yanaguana (page 813), the city has acquired a taste for military pay rolls.

Here Robert E. Lee, commander of the Department of Texas, struggled with his conscience whether he should fight in the Civil War or "resign and go to planting cotton." Obliged to leave without his belongings, he never recovered them.

In 1870 the city offered 40 acres to the War Department for an Army base. The result was Fort Sam Houston, named for the first elected President of the Texas Republic, a man who strove to avert the State's secession.

Fort Sam, now grown to 3,353 acres, is as much a part of the city as it is of the Army. New Braunfels Avenue, a main thoroughfare, intersects the post. There Geronimo and his Apache band were confined in September 1886 (Plate IX).

At the Alamo, Shrine of Texans' Devotion, Palms Get a Trimming for San Antonio's Fiesta Week

[illegible]

As the Fiesta Begins, San Antonio Girls and Costume and Daughters of Texas Tour Drivers Spread the Alamo Flag

Humble Sacrifices and Other Horse Power Wonders

[illegible]

Every Visitor Turns to Missions Worry Monks Forced Invasions to Close and Pray

Espada Remains a Living Mission, Whose Children Stem from Its Pioneer Tenants

Botanical Flowers Fusion Pay Homage to Beauty at Carnival's Climax

Dark Eyes Lost in the Patio of the Spanish Governors' Palace

Latin-American Night Salutes Good Neighbors

Giovanni Battista Tiepolo, Venetian, 1696–1770, Two Generations Apart

Training for the Spanish-American War, the Roughriders camped at the fair grounds. Their second in command, Theodore Roosevelt, paraphrasing the San Jacinto battle cry, told them: "When we get at the Spaniards, I want your watchword to be, 'Remember the Maine!'"

In 1916 John J. Pershing left San Antonio for Mexico to lead his expedition against Villa. Coming back as commander of the Southern Department, he was soon called to command the AEF in France.

It would be difficult to name a leading American general of World War II whose professional career did not in San Antonio background. Douglas MacArthur, son of a major at Fort Sam, attended a military academy here. Young Second Lt. Dwight Eisenhower coached another academy football team. From Japanese prison camps Gen. Jonathan Wainwright came back to be commander of the Fourth Army at its San Antonio headquarters, until his retirement last August 31.

Cradle of the Army Air Forces

At Fort Sam Houston the Army Air Corps hatched out in 1910. Lt. Benjamin D. Foulois, assembling a gasoline engine and some bamboo poles, catapulted the crate off the ground. To teach the Army to fly, Congress allowed a wrecked biplane and $150.

By the time World War I rolled around, the Army was convinced that San Antonio had good flying weather. Kelly Field, that world's famous flying school, was opened in April, 1917. Within eight months it swarmed with 32,000 men. Kelly had the first schools for air observers, air navigators, and bombardiers.

Carl Spaatz, Ira Eaker, Jimmy Doolittle, and other future air generals got their training there. In 1945, Kelly and Duncan Fields merged to become the San Antonio Air Depot, the Army's largest aircraft-repair base. Damaged planes limped in from all corners of the world.

Randolph Field, opened in 1930, became the "West Point of the Air," but [illegible] it was turned into a B-29 base. [illegible] out of town. Randolph is a little city in itself. From the air it presents a striking view, its streets radiating from a hub and intersecting circular concentric drives.

When he retires, your old soldier, general or sergeant, eyes San Antonio with favor. There he can live beside those who talk his language.

Many travel-weary Army wives will confess feeling homesick for the city of their birth. So many San Antonio girls have married into the service that the city has become known as the "mother-in-law of the Army."

If the military flavor lingers, so does the aura of cowboy days. Traffic rolls over streets that twist along old mustang and cattle trails. San Antonio visibly remains a cowmen's town. It is their marketing headquarters. Their wives shop in its department stores, their children attend its many academies and colleges (page 831).

Cowboy Boots Tread Hotel Carpets

You will find cattlemen from the Gulf coast, the western plains, the border, even Mexico. Others live in suburban mansions while foreman manage their enormous ranches.

If you wish to see these men, drop into the lobby of the Gunter Hotel. Many will be reclining in easy chairs. They may be in the most unpretentious woolen or khaki trousers. Whichever kind, the cuffs hang down over elegant cowboy boots.

I spoke to a man who I judged from his boots, must be the king of cattlemen.

"No, son," he said. "I'm a farmer. They kill me for wearing boots. But for real comfort I can't find their equal. Men who laugh at women's high heels don't know what they're missing. Now, I have flat feet, and they hurt in low quarter shoes. A boot, with its reinforced instep, rests me. Somehow the high heels make me stand straighter. I can dance better in cowboy boots. But they're no good for long hikes. After a few miles they'll kill you."

Last spring I met a San Antonio artist wearing cowboy boots.

"I do outdoor painting," he explained, "and I'm afraid of rattlesnakes."

Consult the San Antonio telephone directory; it lists half a dozen bootmakers (Plate XIII). I talked to one who had been fitting cattlemen for years. He keeps their exact measurements on wooden blocks. For a new pair they send him a postcard. He told me about boots:

"A steel spring built into the arch distributes the stirrup's pressure across the entire foot. High heels grip the stirrup and sustain the spurs. They slope forward so as to dig into the ground when a dism ounted rider wrestles a roped calf. Also, high heels prevent the toes from curling up like Turkish slippers."

"Unsainted Anthony" Has Reformed

Boots are a common sight on San Antonio businessmen; even high-school boys wear them.

But you never see a revolver worn openly; Texas cattlemen no longer "catch cold" without one.

There was a day when six-shooters, known

For Fiesta Week, Texas Is a Mexican Place

[illegible]

... or Creatures," were checked behind the Buckhorn bar. Desperadoes were wont to ride into town from hide-outs in the hills for an evening's whoop-[illegible] ... houses were wide open [illegible] gfighting was promoted on the [illegible] ... Winner: the [illegible] Antonio was the [illegible] ... sainted Anthony," [illegible] The Free State of Bexar."

A marker on Military Plaza identifies the site of the Council House fight. In 1840 the citizens held conference with the Comanches, just off the warpath. Peace proposals getting nowhere, the braves drew knives and scalping knives and ran [illegible] toward the river. Fighting in [illegible] side were [illegible] warriors.

Red men have raided themselves in houses. Burning turpentine evicted them. Armed with rocks a citizen [illegible] "Old Paint" stood off a [illegible] By evening the Indians had lost 33 dead, the [illegible]

Under the Texas Republic the city became infested with so many bandits [illegible] Mountaineers formed a [illegible] ... on South Flores Street was named in honor of their leader [illegible] Mondragon. So many men were [illegible] from its hamlets that a rhymester wrote:

> The law of Mondragon
> All Texas will [illegible]
> [illegible]
> [illegible]

Incidentally, no San Antonian pronounces his city's name to rhyme with Mondragon's.

I was amused by a recent motion picture whose villain directed a henchman in words something like [illegible]

Ride down to Uvalde and round up a hundred women.

Uvalde [illegible] the west. Wa[illegible] built partly by the peaceful sons [illegible] refugees from German military [illegible] Gunplay [illegible] ... [illegible] ... [illegible]

San Antonio has a thi[illegible] of their cousins. Its breweries, flour mills, several big stores and banks were been in German family hands [illegible] years. Has give San Anto[illegible] [illegible] or Milw[illegible]

Weeping Willows Arch a Watery Playground Along Through the Business Center

[illegible]

A century after the Teutonic immigration [illegible] German is rarely heard but Spanish has lasted through the [illegible]

Little Mexico in the U.S.A.

Only four other cities of the border have a larger Mexican population. A third of San Antonio's citizens have, or have, at least Mexican or Indian origin.

Among the older, the Mexican Americans speak Spanish, though [illegible] understand English. Because of that, they are called [illegible] "Mexicans."

Even San Antonio's original settlers, the Indians [illegible] descendants of Indians living there before white men arrived, are "Mexicans." So are the descendants of Spanish-speaking persons who shed their blood for [illegible] "Americans" and "Mexicans" [illegible] making San Antonio [illegible]

"Americans" agreed that "Mexicans" had made an impressive [illegible] World War II. [illegible] Mexicans were [illegible] to Mexico. Many [illegible] Mexicans [illegible] in the service.

The typical Mexican [illegible] uses an expression that [illegible] for a benefit, but actually [illegible] courteous and [illegible] to a fault. His [illegible] rather sad [illegible] a [illegible] smile. His [illegible] daughter [illegible] proud [illegible] XXI.

San Antonio has recently [illegible] Mexico. City [illegible] Francisco Madero [illegible]

Texas Land, Cattle, and Oil Empires Maintain Headquarters in San Antonio's Towering Office Buildings

[illegible]

At the Outdoor Theater There Is a Gulf Between Audience and Actors—the Floodlighted San Antonio River

Young Jersey Beauties Display Shapely Figures Paraded Before Their Judges

[illegible]

[illegible] Mexican [illegible] Mexicans, near Brownsville Park, he built a [illegible] striking color scheme [illegible] the curiosity of visitors.

[illegible] removed from Dr. Urrutia's mansion is the Mexican quarter—a [illegible] where most of the Mexican [illegible] 500 blocks. The quarter lies west of San Pedro Creek. Going west of the San Pedro is like going south of the border; the sights and odors are those of a market place in Mexico.

A slum clearance project replaced many of the district's shacks with airy apartment houses, but the very poor still exist in wooden [illegible] San Antonio calls *corrals* (pens).

Notwithstanding its poverty, I found the quarter bright with flowers. Front [illegible] with [illegible] [illegible] with colored pictures. Even funeral wreaths were gaudy.

Antique Automobiles Chug and Honk

Through the streets ambled ancient cars, their back seats often filled with junk. Great mechanical ingenuity was required to keep them running.

It is worth your life to [illegible] the Mexican quarter. Drivers creeping along outer lanes make [illegible] turns with bursts of speed. Right turns, of course, are made from center lanes. As houses block your view at most corners, your best bet is to honk.

An Acrobatic Young Caballero Clears the Bar at Peacock Military Academy

[illegible]

[illegible] Spanish.

I looked into a classroom with a Flaxen letter, carving these [illegible] *abogado* (lawyer). [illegible] houses and lots. *Arreglamos papeles de ciudadania* (We arrange citizenship papers). Birth certificate [illegible] *Se habla español* [illegible] Spanish spoken.

Milam Square, facing [illegible] Mexican quarter's Times Square and solarium. On sunny days the [illegible] with [illegible]

A [illegible] wear. El Teatro Nacional [illegible] with a double helping [illegible] Spanish, the other [illegible] to language students.

Teatro auditorium contains [illegible] Teatro [illegible] double width [illegible] to me, are for fat persons and [illegible] children. They are better known to the clientele [illegible] no arrangement interfere with [illegible]

[illegible] Spanish titles about [illegible] love, death and wizardry. [illegible] *buratas* (log sales). Old photographs [illegible] radios [illegible] Mexican [illegible] [illegible] shoes are sold for [illegible] pesos.

Herb shop [illegible] [illegible] [illegible]

Here [illegible] cooked meat and [illegible] toothpowder. Peddler [illegible] trinkets [illegible] *pan dulce* (sweet bread).

[illegible] mammoth pineapples [illegible] Mexico. [illegible] papayas, and avocados [illegible] of cole [illegible]

[illegible] serve substantial [illegible]

recently for as little as a dime. Chile con carne, tamales, *enchiladas*, *tacos*, and tortillas are favorites, as indeed they are all over Texas (Plate XV).

Following a recipe centuries old, Mexican women roll pancake-shaped white-corn cakes by hand. I saw tortillas cooked on machines imported from Mexico City. Like a laundry's white starched collars, they emerged curling from a series of steaming hot rollers.

Mexican dishes are not the only surprises on San Antonio menus. On Sundays grilled rattlesnake meat is served to visitors at the Reptile Garden in Brackenridge Park. Epicures rethuse over broad breasted turkey. Do you relish *cabrita or chevon?* (Page 843.) Try a praline; every candy store is stocked with these pecan-and-sugar candies.

Before the war San Antonio's cherished T-bone steak, fried to the consistency of shoe leather, was a 45-cent restaurant item. Juicy pit-barbecued beef, rich with smoky flavor, sold last spring for 60 cents a heaping plate.

"Do you think that's too much?" a waitress asked me.

Pecans Shade the City and Give It Work

Looking into the origin of these dishes, I learned some surprising details about San Antonio and its countryside.

Pecan trees cover a large part of the city. As I surveyed them from a lofty building, they obscured dwellings. They provide shade, beauty, and a bountiful nut crop each fall. On a hot summer day no sound is sweeter than their rustling leaves heralding evening's breeze from the Gulf of Mexico. At dusk fireflies dance through their branches.

No doubt the pecan yield is Texas's oldest. Geological formations are garnished with fossil nuts. Early explorers were amazed by the big growths.

Pecans grow anywhere on the Texas plains except where hard strata turn back taproots. Larger groves follow river bottoms, where floods spread the seeds. Many a bottom-land holder has paid his taxes by selling the pecans that cost him so little labor.

Texas produces about one-fourth to one-half of the Nation's crop, and San Antonio boasts that it shells and markets a large percentage of the Southwest's crop.

The industry was launched in 1882 by a candy manufacturer who shipped fifty barrels to the East on speculation. Friendly Indians gathered the nuts.

For years shelling was done by hand. Machines revolutionized the industry and improved the pay scale.

Visiting the Southern Pecan Shelling Company, I watched its mechanical sheller crack two shells in a twinkling without breaking the meats.

Two thousand of these machines, housed in a loft, require the attention of twenty men. Each month they open a million pounds of nut meat. Automatic machinery discards most of the shell. Women, working over a moving belt, pick out the remainder.

The factory owner told me that nothing was wasted. Candymakers use the fine meat crumbs. Ground into a powder, the inner shell was used in wartime to stretch out the cinnamon supply.

Though eastern buyers pay premium prices for paper-shell pecans, the wild nut is the basis of the industry. Some improved varieties have been budded on to hardy, native root stock. An old tree may bear five or six kinds.

Man Tailors Turkey for White Meat

My next "discovery" was the broad-breasted turkey. This man-tailored bird, developed in England around 1900, yields 40 percent more breast meat than the native turkey. He is bred for the table, not the open range. His short legs are ineffective for running and his meaty wings can scarcely rise.

Housewives complained that the bird was too big for refrigerators. To accommodate them, wholesalers split the turkey into halves and even quarters.

The San Antonio-Austin-Cuero triangle, one of the Nation's largest turkey producers, concentrates on the new turkey. About half its flocks carry some broad-breasted blood.

To see purebreds, I visited Ludwig Foundation, a demonstration farm some 55 miles from San Antonio. Walter Cardwell, the manager, said:

"Breeding, crossing, and selection started with the old bronze turkey. We got our stock from the State of Washington. We believe we have improved the breed.

"You might compare the turkey's history to that of beef cattle. Both the longhorn and the wild native turkey were adapted to life on the range. They knew how to hunt cover and protect themselves against marauding animals. However, they were not the best breeds for eating. Today the longhorn exists only in zoos. Before long the common turkey may join him there."

Ah! Turkey Smoked Like a Ham

Consumers clamor for smoked turkey, on which they may nibble for weeks.

This area concentrates on hatching-egg production. Its turkeys may live outdoors the year round; hens lay during the winter.

Infantryman Present the Colors as Fort San Houston Celebrates Fiesta Week

[illegible]

Thomas Jefferson Had Schools, Which Teachers Modern Living Encourages Youngsters to Be Good Citizens

[illegible]

From the Lord Store, New in Fashion Emporium Comes Sunbeams for Colorful Dresses

Sleepy Drakers and Worlds Women Lodging In Among Big Trucks Discussing a Traffic Snarl

With Dance Leotard and Bermudas Individuals Lounge on Upper Deck Floor and Share Pride

Texas Bexar County Meadow Schoolgirls Laze on a Carpet of Bluebonnets the Texas State Flower

Texas Has Adopted Mexico's Hot Tamale as Its Own

Sewing Tots' Garments Is Big Business in San Antonio

Tassel in Braided Straw, Trim It with Beads, Use Glycerin a Tassel Closer.

"Thus we have an advantage over northern breeders," said Mr. Caldwell. "To produce chicks in time for the Thanksgiving mass, the North orders eggs from us in December."

To supplement sales, the Foundation buys eggs from breeders under its supervision. At the time of my visit it paid 27 cents an egg. An owner of 30 hens sold 44 eggs per hen and made a net profit of $7.24 a hen. A man using lights to stimulate laying made $8.31 a hen.

In a feeding lot, I saw what selective breeding had done to the pugnacious, roving gobbler. Several hundred poults represented man's idea of what a made-to-order turkey should be.

These pampered birds were born under controlled temperature. Their brooder house was cleaned daily. They got vitamins and minerals. Before long they would be vaccinated and wormed.

Now 11 weeks old, they had been put on a grazing lot. Too lazy to walk, they had left the far end untouched, though it was green with tender oats. To tempt them afield, an attendant moved their mush trough periodically.

Gentle dueling between poults showed that most of the fierce old gobbler's fighting spirit had been bred out. Notwithstanding, certain instincts remained. When a hawk swooped down, the poults ran for their shed.

Canvas Saddles Worn by the Hens

In the laying pens, where hens are coupled with toms, each layer has her own trap nest. As one entered her nest, I saw a door fall automatically, locking her in. Later an attendant released her, stamped the fresh egg with her number and the date. Thus a record was kept on each shell.

On her wing the hen wore a metal clip showing her pedigree. Across her back a heavy white canvas was stretched like a saddle. I was astonished by this wearing apparel. The attendant explained.

"We call them turkey saddles. Some of the toms are pretty rough. Canvas protects the hen against injury. Without it, there is a 30-percent rejection of slaughtered hens after the laying season. Dealers do not like to offer a bruised and corrugated turkey."

Turkey saddles? What will they have next—rose-colored glasses for chickens? I mentioned these saddles to a San Antonio chicken fancier. This was his boast:

"I have something that will beat that."

With that, he produced a pair of tiny red glasses. These, he told me, were designed by a novelty company for aristocratic but cannibalistic chickens. Capriciously, they peck at weaker birds' red-rimmed eyes. To break this habit, a few poultrymen pierce the beak and insert a tight plug. In it they attach a nose-piece for glasses. Red lenses confuse the cannibal; everything looks rose-colored (page 843).

Cattle Ranch Shapes a New Breed

Ten miles from San Antonio, within easy sight of its skyscrapers, lies the 3,500-acre Essar Ranch. Essar raises no cattle for slaughter; its yearly sales go to breeders. Here an experiment is fashioning a new American breed of cattle adapted to hot weather and high humidity.

Essar stands for Scientific Research, a name which expresses the aspirations of Tom Slick, Jr., the genetics enthusiast who owns the ranch. During his absence I toured Essar with Arthur McArthur, the manager.

Paralleling a United States Department of Agriculture experiment at Jeanerette, Louisiana, Essar is developing a cross between the Aberdeen-Angus, heavy meat producer from cool Scotland, and the Brahman, humpbacked, heat-tolerant cow from tropic India.

A Brahman cow resists to a large degree the Gulf coast's enervating heat, fever ticks, and flies. She fights the brush like no other except the Afrikander. A hardy traveler, she trots a mile or more to water. However, a large percentage of waste development goes into her hump and dewlap, the latter a mass of loose skin beneath the neck. Ears are long and drooping; horns differ widely.

Angus, perfection type of beef cattle, produces finely marbled flesh. The comparatively short head is polled (hornless), the body low and compact, and the coat a glossy black.

However, the Angus, like other British breeds, is not acclimated to hot weather. Without heat tolerance, an important factor in fertility, the tropic herd tends to die out.

A Cowman's Problem in Fractions

"What we want," said Mr. McArthur, "is a bull we can sell to the Gulf coast to improve its crossbred Brahmans. If we can combine and fix the best qualities of Angus and Brahman, we shall have that bull. Our goal is the fixation of the ¾ Brahman-¼ Angus into a heat-resistant meat producer with a solid black coat.

"The first cross with the polled Angus removes most of the Brahman horns. This first-generation hybrid is known as the purebloodhalf blood. In the next step a half-blood is mated to a pure Angus, producing a ¾-¼ cross. The desired ⅜-⅝ cross is obtained

Boys Scramble for Coins Tossed from a Bridge

[illegible] channel [illegible] In [illegible] a [illegible]

by pairing the [illegible] Angus with a [illegible]

Both breeds put their stamp on the calves. In appearance the calves are predominantly Angus: hornless, uniformly black, low, and compact. Droopy [illegible] straightened out. Most of the [illegible]less hump and dewlap are gone. Henceforth it will be a matter of selection and fixation of type.

Some northern cattlemen consider the San Antonio area too hot and the flies too bad.

"We have proved the contrary," Mr. McArthur told me. "With proper management there [illegible] out of 365 that we can't have [illegible]. During the winter our cattle [illegible]. Our calves and milk cows know what a [illegible]."

In our five years here we have produced two grand champion Hereford bulls [illegible] Royal Rupert [illegible] became the champion in two [illegible] Hereford shows.

[illegible] we drove in an auto[illegible] across grass fields to T. Royal Rupert's pen.

"Look at him!" Mr. McArthur exclaimed. "The instant I saw him [illegible] a newborn calf I knew he was our future herd bull. He had straight [illegible] compact body [illegible] Mr. McArthur [illegible] Royal Rupert [illegible]"

Cabrito or Chicken, It's Good Meat

Thirty years ago [illegible] Texans [illegible] fit only for the poverty-stricken. [illegible] it is a favorite dish [illegible] Mexicans [illegible] the [illegible] With [illegible] chefs [illegible] San Antonio's [illegible] in the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Seeing the World Sadly Through Rose-colored Glasses

[illegible]

[illegible] Look at your [illegible] Map of the World. San Antonio [illegible] — it celebrated last spring.

Northers Spoil Perfect Weather

[illegible] San Antonio's Weather Bureau [illegible]

[illegible]

[illegible] San Antonio [illegible]

Wild-eyed Steers Shy Away from the Camera, Thrust Horns Up Nervously

[illegible]

[illegible]

Who Won the War? Every Texan Knows!

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

The Society's New Map of the South Central United States

A RICH and varied area as large as France, Germany, and Czechoslovakia combined is presented in the National Geographic Society's new map of the South Central United States—Arkansas, Louisiana, Oklahoma, and Texas.*

This 29½-by-24-inch supplement to this issue of the NATIONAL GEOGRAPHIC MAGAZINE is the fifth in The Society's series of large 10-color sectional maps of the United States. When the map of the North Central States is issued as a supplement next year, The Society's 1,600,000 members will have acquired, in six sections, a master reference map of the Nation equivalent in size to a single sheet of 28 square feet.†

All maps in the United States series are drawn to the same scale—1:2,500,000, or 39.46 miles to the inch—with one exception. The Northeastern United States map, because of the area's dense population and consequent increase in number of place names, was scaled at 1:1,750,000 or 27.6 miles to the inch.

Like its predecessors, the South Central United States map shows a wealth of accurate up-to-date detail, including roads, railways and waterways. Its scale, design, clarity, and cartographic completeness make it useful both as a general geographic reference source and for planning trips through this vast and diversified region. The map is drawn on the Albers Conical Equal-Area projection, and distances may be measured upon it with little appreciable scale variation.

The names of the four States shown complete on this map are used to form a striking border design.

Names Eloquent of Early Settlers

The 5,683 place names on the map reflect the latest official population figures—and many also attest to the character and humor of those who first settled here.

Early settlers of these four States were evidently proud of their womenfolk. For example, Arkansas place names include a Jennie, an Elmore, and a Daisy.

Oklahoma honors Maxie and Corinne. Louisiana, which boasts old French names such as New Orleans, Baton Rouge, and Lake Pontchartrain, also lists Eunice, Ida, Lillie, and Bernice. Texas has her Nancy, Maud, Melissa, and Alice, just south of which is Bee Bluff.

Other interests of the early settlers are reflected in such place names as Bowlegs, Bigfoot, Blue Eye, Smackover, Dime Box, Muleshoe, Lariat, Oakay, Snowball, Evening Shade, Loco Hills, and Dimple.

The new map highlights many points of historic, recreational, and scenic interest. Near its western border, in New Mexico, is the location of the first atomic-bomb test in the appropriately named Jornada del Muerto. Lack of water in this ninety-mile stretch of trail prompted the Spaniards to name it Journey of the Dead Man. To the south 70 miles, in the White Sands area, is the testing ground for the captured V-2 rockets.

Millions of Cattle Roam Open Spaces

Reaching across the great central plains from the Mississippi River to the Rocky Mountains, the South Central States form one of America's biggest grazing grounds. Within the four States are 14,000,000 cattle, more than one for every man, woman, and child in the area. Figures for other livestock also are impressive:

Sheep	10,000,000	Chickens	89,000,000
[illegible]	[illegible]	[illegible]	[illegible]
Goats	3,500,000	Horses and mules	2,000,000

Yet the land is not crowded.

Fields planted to wheat, cotton, and corn cover an acreage sufficient to blanket every square foot of Pennsylvania.

Hayfields of the South Central States, if put together, would spread over the whole of New Jersey, and an acreage of similar extent is planted in sorghum.

Most of the country's rice crop is grown on 1,200,000 acres in this region, and a similar area is planted in peanuts.

[illegible] Commercial forests cover a stretch larger than the entire State of Nebraska.

Thousands of acres produce citrus fruits, pecans, and tung nuts.

Crystal City, Texas, in the heart of a truck-growing region, honors Popeye, patron of

* Members may obtain additional copies of the new map, "South Central United States," and of all standard maps published by The Society, by writing to the National Geographic Society, Washington 6, D. C. Price, in United States and Possessions, 50¢ each on paper, $1 on linen; Index, 25¢. Outside United States and Possessions, 75¢ on paper; $1.25 on linen; Index, 50¢. All remittances payable in U. S. funds. Postage [illegible]

† Other maps in the National Geographic Society's sectional series of the United States have been issued as supplements to these issues: Southwestern United States, June, 1946; Northwestern United States, June, 1944; Northeastern United States, September, 1945; Southeastern United States, February, 1947.

spinach, with a large statue in the town square.

Most of our domestic cane sugar is grown on 264,000 acres in Louisiana.

Two-thirds of the nation's petroleum—forty percent of the world's output—comes from pools beneath the surface of the South Central States. All four States also are heavy producers of natural gas, accounting for two-thirds of the nation's output.

Louisiana was admitted to the Union on April 30, 1812. Seven years later its present boundaries had been definitely established. By that time its principal city, New Orleans was a century old; the original 4,000 Acadians who came to southern Louisiana from Nova Scotia between 1760 and 1790 had increased in numbers and were known as "Cajans"; Gen. Andrew Jackson had become the hero of the Battle of New Orleans; and the pirate Lafitte and his band had settled down to fishing and trapping in the swamp lands below New Orleans.*

New Orleans Booms as Port

The first steamboat to navigate the Mississippi reached New Orleans in 1812, and the city soon began to boom as a shipping point for the Mississippi Valley. By 1840 New Orleans was the fourth largest city in the United States, and its second port.

Planters emigrated to Louisiana's outlying parishes and laid the foundation for the State's vast cotton and sugar production of the future. Successors to early fur trappers built up that business until today Louisiana is the nation's top fur-producing State.

Oklahoma, once part of the Territory of Missouri, and later part of the Territory of Arkansas, became a Territory in its own right in 1890. Adjacent to it on the west lay Indian Territory. These "Twin Territories" became the State of Oklahoma in 1907.

Today oil production overshadows other industries in the State, although agriculture is extremely important. Within Oklahoma's borders lie granite, marble, limestone, sandstone, brick clay, asphalt, glass sand, tripoli, volcanic ash, and gravel.

In Oklahoma's Wildlife Refuge in the Wichita Mountains, travelers may see one of the last buffalo herds on its native ground. Here also is a small herd of historic Texas longhorns, the tough old cattle which contributed so much to the opening of Texas and the great plains.

The Ozarks of Missouri, and Arkansas, too, are living museums of folk lore and present-day recreation areas.

Arkansas, also once part of Missouri Territory, became a separate Territory in 1819 and by 1836 had achieved statehood. During the panic of 1837, thousands of farmers crossed the Mississippi and poured into the State, almost doubling its population to 97,574 by 1840.

As early as 1800 cotton was introduced into Arkansas. Today the State maintains its place as one of the leading cotton producers and usually ranks second or third in the nation. Production of cottonseed oil also has risen to huge proportions.

The only independent nation to become a part of the United States is Texas, which in 1836 freed itself from Mexican rule and in 1845 was admitted to the Union. On the record of those eventful, historic years appear the names of the brave defenders of the Alamo and the heroes of the Battle of San Jacinto.†

Texas is as big as all New England, New York, New Jersey, Pennsylvania, Ohio, and Illinois. Its town of Dalhart, in the northwest corner of the State, is closer to the capitals of New Mexico, Oklahoma, Kansas, Colorado, Nebraska, and Wyoming, than it is to Austin.

The Lone Star State stretches 800 miles from the semitropical Rio Grande to its northern border. Its greatest width is about 750 miles. The Rio Grande forms the State's boundary with Mexico for about 800 miles.

Texas enjoys widely diversified interests. Cattle, wheat, corn, fruit and vegetables, oil, timber, manufacturing, and shipping all contribute heavily to its wealth. Its famous King Ranch covers as much ground as the State of Rhode Island. Here, by crossing native short horns with Brahman cattle from India, the ranch has developed the Santa Gertrudis strain, America's first distinct breed.

Randolph Field, Texas, is the "West Point of the Air." Like all flying fields on the new map, it is marked with a small square symbol.

The new map continues the route of the Intracoastal Waterway as shown on the Map of Southeastern United States, carrying it from New Orleans to the mouth of the Rio Grande at Brownsville.

Ships traversing the Sabine-Neches Canal, a part of the Waterway, appear to be cruising the streets of Port Arthur, the nation's biggest oil-shipping center. Here big pumps can load a 150,000-barrel tanker in one day.

A dredged ship canal, 50 miles long, converts Houston, an inland city, into a seaport.

* See "Louisiana Trades with the World," by Frederick Simpich, in this issue, page 705.

† See "Carnival in San Antonio," by Mason Sutherland, in this issue, page 813.

NATIONAL GEOGRAPHIC SOCIETY

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To carry out the purposes for which [illegible] ... All receipts are invested in The Magazine itself or expended directly to promote geographic knowledge [illegible]

[illegible] The Magazine [illegible] generous remuneration is made.

In addition to the editorial and [illegible]

[illegible]

[illegible] history of the [illegible] ... which were [illegible] ... the Atlantic ... [illegible] and dwellings in that region [illegible] ... three hundred years.

In Mexico, The Society and the Smithsonian Institution, January [illegible], discovered the oldest work of man in the Americas for which we have a date. This slab of stone is engraved in Mayan characters with a date which [illegible] November [illegible] ... antedates by [illegible] years anything heretofore dated in America and reveals a great [illegible] ... previously unknown.

On November [illegible], 1935, in a flight sponsored jointly by the National Geographic Society and the U. S. Army Air Corps, the world's largest balloon, Explorer II, ascended to the world altitude record of [illegible] feet. Capt. Albert W. Stevens and Capt. Orvil A. Anderson took aloft in the gondola nearly a ton of scientific instruments [illegible]

The National [illegible] S. Army Air Forces Expedition [illegible] ... The Society [illegible]

The Society cooperated with Dr. William Beebe in [illegible] ... during which a world record depth of [illegible] feet was attained.

[illegible] was given by [illegible]

[illegible]

were thereby saved for the American people.

One of the world's largest icefields and glacial systems outside [illegible] ... discovered in Alaska and [illegible] Washburn while exploring for The Society and the Harvard Institute of Exploration, 1938.

Make this an extra-special Christmas

MOTHER. [illegible] $60.50

FATHER. [illegible] $60. [illegible] $60.

DAUGHTER. [illegible] $71.50

GRANDMOTHER. [illegible] $120 – $5,000

SON 1 [illegible] $59. [illegible] $22.23.

[illegible] $57.76 [illegible]

[illegible]

UNION PACIFIC

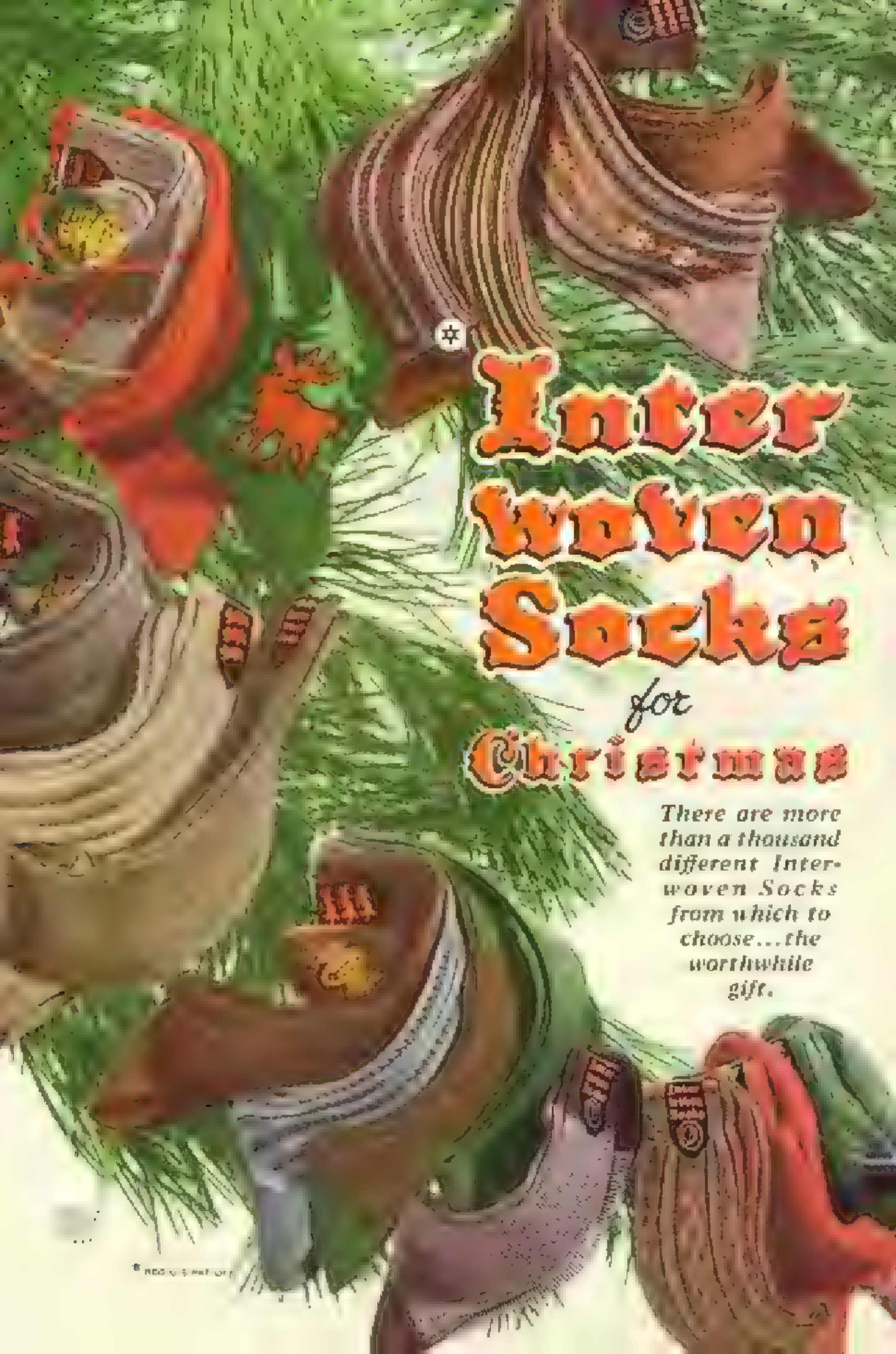
THE ROMANTIC CHARM OF *California*

When visiting the Golden State, don't miss seeing the time-mellowed Spanish Missions. You'll be intrigued by their romantic histories . . . find them to be a charming contrast to other attractions such as the sandy beaches, picturesque golf courses, quaint foreign sections and colorful, cosmopolitan night life. A world of beauty and enjoyment awaits you in California.

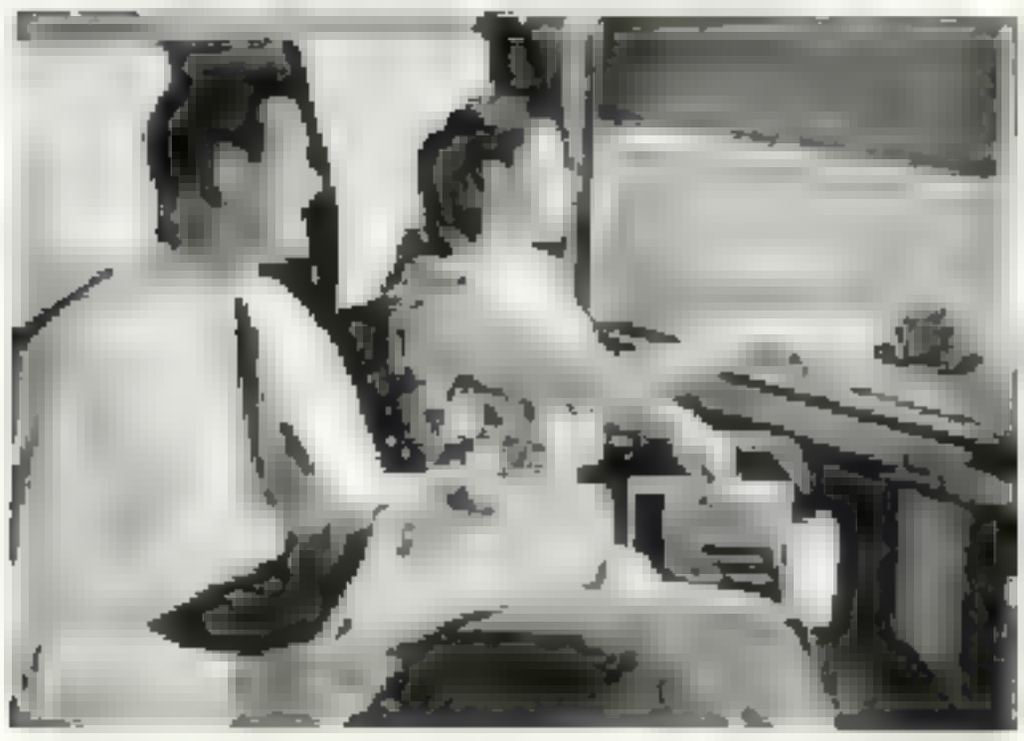
Go there in restful comfort—by train. Union Pacific's daily Streamliners provide spacious, smartly appointed accommodations. Also other fine trains to meet your requirements. Write for free California booklet beautifully illustrated. Address Room 124, Union Pacific Railroad, Omaha 2, Nebraska.

UNION PACIFIC RAILROAD

Road of the Daily Streamliners


Inter-woven Socks
for
Christmas
There are more than a thousand different Inter-woven Socks from which to choose...the worthwhile gift.

Aren't you glad!



1. [illegible]

2. [illegible]

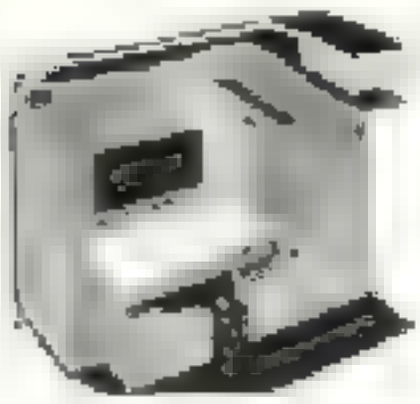
3. [illegible]

4. [illegible]

Go Pullman

THE SAFEST, MOST COMFORTABLE WAY OF GOING PLACES FAST!

Choice Accommodations in New Pullman Cars Soon Going into Service



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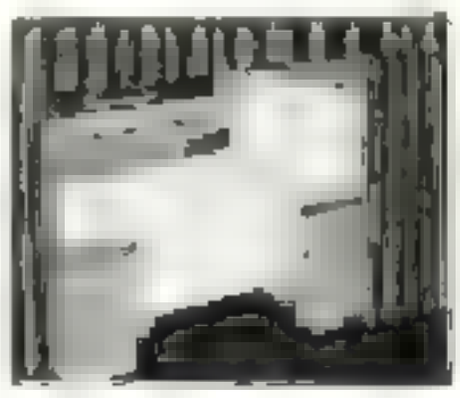


[illegible]

Loveliest Gift—Great Music in Natural Color Tone from this FM AM Radio-Phonograph

Richer by one sell-up are your gift with the Musaphonic. Here is [illegible] the composer dreamed—all the artist expressed [illegible] in the [illegible] climax of [illegible].

Touched on the magic of the wand. Hear as [illegible] reveal new and [illegible] beauty. You hear the [illegible] of the original performance [illegible] sound, [illegible].

Listening to the [illegible] is like [illegible] genuine FM, [illegible] to [illegible] natural [illegible] hearing and [illegible] interference. Favorite standards [illegible] with new [illegible] personalities.

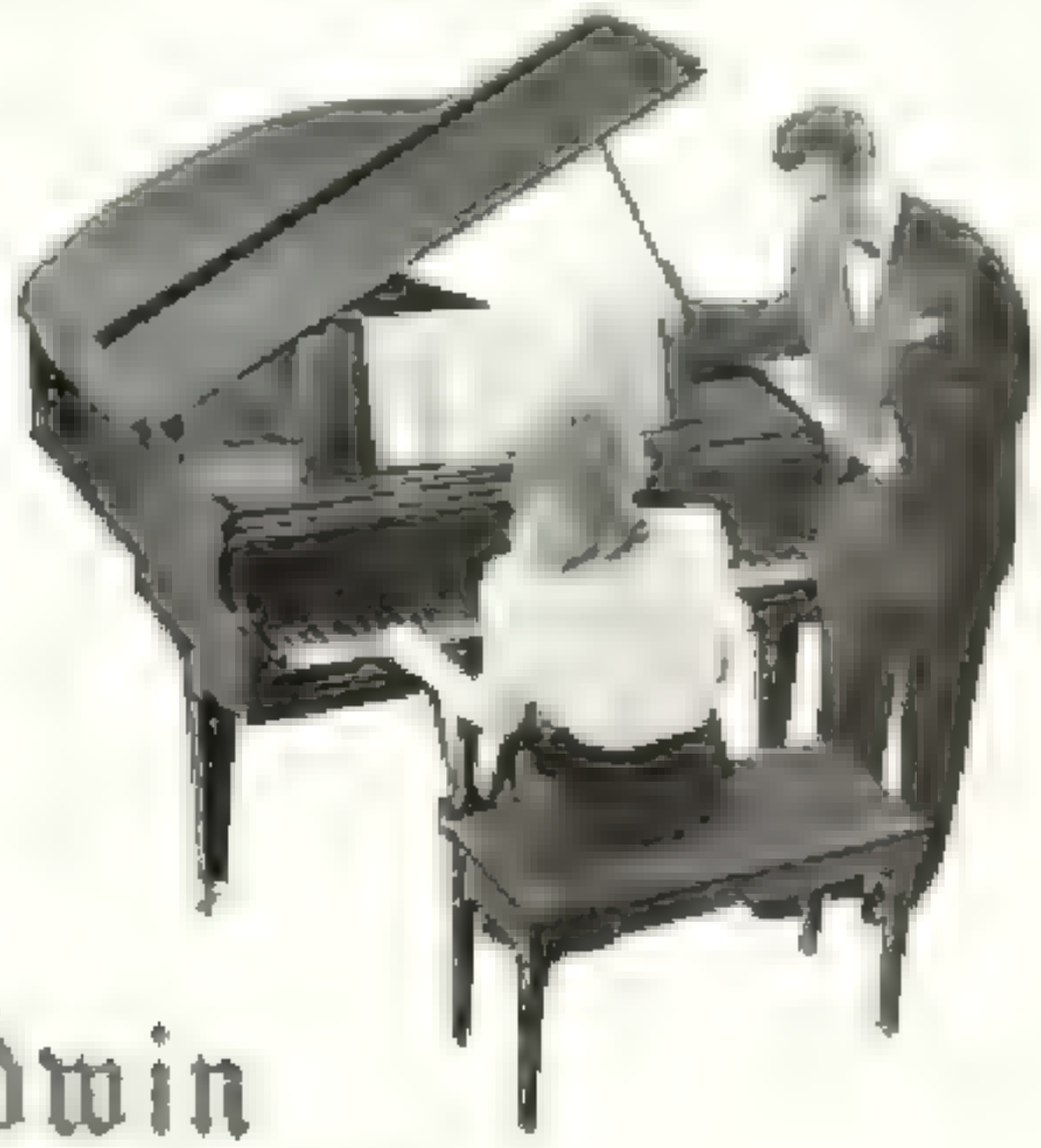
The Musaphonic Stereo, [illegible] keeping [illegible] a perfect [illegible], is one [illegible] of the many [illegible] models from which you may choose. Prompt [illegible] of great [illegible] Musaphonic [illegible] will [illegible] for years and years [illegible] but for years [illegible] throughout the years. General Electric Company, Electronic Park, Syracuse, New York.

GENERAL ELECTRIC

RADIO-PHONOGRAPHS

GOOD *friends, congenial atmosphere, inviting surroundings—these are the essentials of hospitality.*

Music adds the choice quality of charm. The BALDWIN, *chosen by the world's great masters, adds the final element of distinction. It is truly* TODAY'S GREAT PIANO. *Your Baldwin dealer is now displaying new models.*



Baldwin

THE BALDWIN, ACHEROND, HAMILTON AND HOWARD PIANOS • THE BALDWIN ELECTRIC

They'll be so much happier with an ELGIN

ONLY IN ELGIN HAS A *DURIPOWER MAINSPRING*

Lord and Lady Elgins are priced from [illegible] to $[illegible]. Elgins De Luxe from [illegible] plus [illegible] Federal Tax

***Imagine*—this new mainspring made of "Elgiloy" metal. It eliminates 99½% of watch repairs due to steel mainspring failures! It completely overcomes the commonest cause of their breaking—rust! And it will retain its "springiness" indefinitely for greater accuracy! Now in all the beautiful new Elgins at no extra cost!**

WHAT an assurance of satisfaction in the watch you choose for someone you love! Elgin has an Elgin [illegible] for every occasion and this new model [illegible] the most [illegible] since jewel bearings were introduced in 1701.

See the beautiful Elgin Watches now at your jeweler's. They all have the DuriPower Mainspring. And they all have rust-proof Elgiloy Alloy Hairsprings, too; are factory adjusted to temperatures and positions [illegible]. The one you want to [illegible] with a watch will be [illegible] happier with an Elgin. [illegible] with "dp" [illegible]

[illegible] most [illegible] watchmaking development in over 200 years!

[illegible] "HOURS OF STARS" on [illegible] Elgin, CBS Radio Network

You'll love it in December

(AS YOU DID IN MAY!)

...the dependable, year-round comfort of New York Central

Always Seasonable! [illegible]

Always Reasonable! [illegible] when you [illegible] low coach fares.

NEW YORK CENTRAL

The Water Level Route—You Can Sleep

Doctor? Lawyer? Merchant? Chief?

What will these babies be in 25 or 50 years?

Many things and many people will shape their lives, of course. Parents, friends, teachers. And one big factor will be health.

Fortunately, babies born today enjoy far more chance of good health and long life than their parents or grandparents did. For example, only 30 years ago, one baby out of every 10 died before its first birthday. Today, the rate is less than one in 20. And the average span of human life has lengthened from about 55 to 60 years.

This wonderful gift of life and health has come towards them by the work and research of professional people. And nutrition has played a part.

Good eating contributes to good health. Our knowledge of what to eat and when has vastly increased in recent years. It will grow even faster in the years ahead—aided by research in great dairies like those of National Dairy. These National Dairy men and women work constantly with milk, nature's most nearly perfect food, to make it more—creating new foods and products from it.

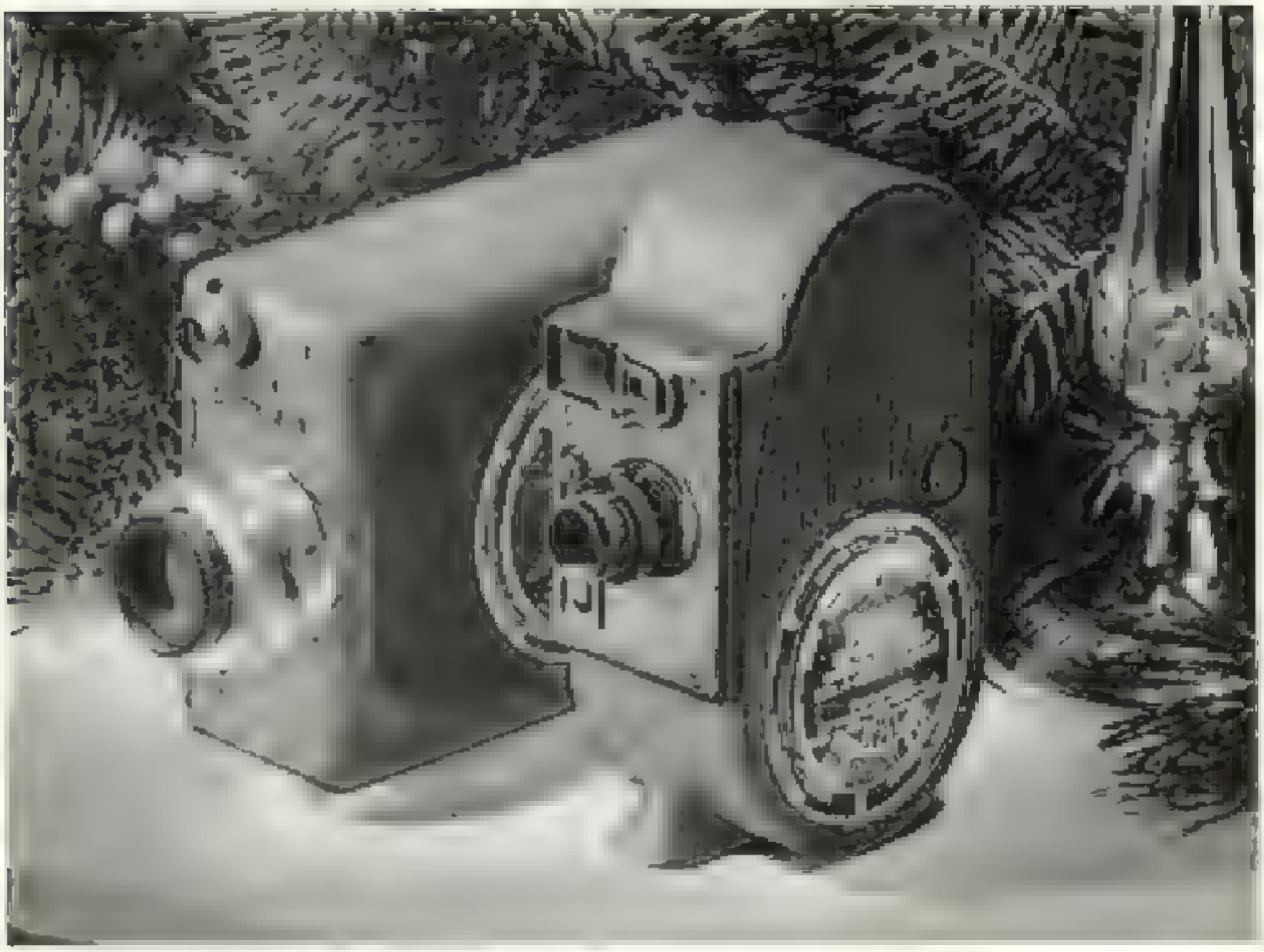
As medical and nutritional research advance together, they carry the hope of healthier citizens and a better world.

Dedicated to the making and better understanding of dairy products as human food . . . as a force for the development of new products and materials . . . as a source of health and enduring progress on the farms and in the towns and cities of America

These brands assure you of a great quality

NATIONAL DAIRY
PRODUCTS CORPORATION

Let FILMO movies be your finest gift



The happy days of Christmas . . . and every other joyous family occasion . . . will give you endless pleasure for years to come — when you [illegible]

Anyone who can take still pictures can make superb Filmo movies . . . in brilliant color or sparkling black-and-white. Filmo cameras are amazingly simple to use. They assure even the beginner theater-quality movies [illegible] the makers of Hollywood's professional [illegible] professional equipment.

Visit a Filmo retailer near Christmas! At better photo dealers — or write for [illegible] to Bell & Howell Company, 7100 McCormick Road, Chicago 45; branches in New York, Hollywood, Washington, D. C., and London.

FILMO SPORTSTER (above, right) weighs only 2½ pounds—convenient to carry anywhere. Easy to load, 8mm film drops into place. Four speeds, including slow motion, plus single-picture control for animating cartoons, titles and maps. Filmocoted lens quickly interchangeable with extra speed and telephoto lenses.

FILMO AUTO LOAD shows film loads in only a moment. Just slip in the magazine of 16mm. film. Four speeds make animated cartoons too. Fast-speed with exclusive Filmocoted lens, quickly interchangeable with [illegible] lenses. Dealer is glad to show how to use it—for any occasion or condition.

40

Famous Makers of

Bell & Howell

Home and the Largest Manufacturers of Professional Motion Picture Equipment for Photographers and the World

This Christmas

THERE'S A PHILCO FOR EVERYONE

For Philco, radio's undisputed leader for 17 years, is now in full supply of your Philco dealer. At any price you wish to pay, this year your Christmas radio can reflect the *quality* which is the promise of the Philco name. Give a Philco for Christmas — nothing less!

PHILCO

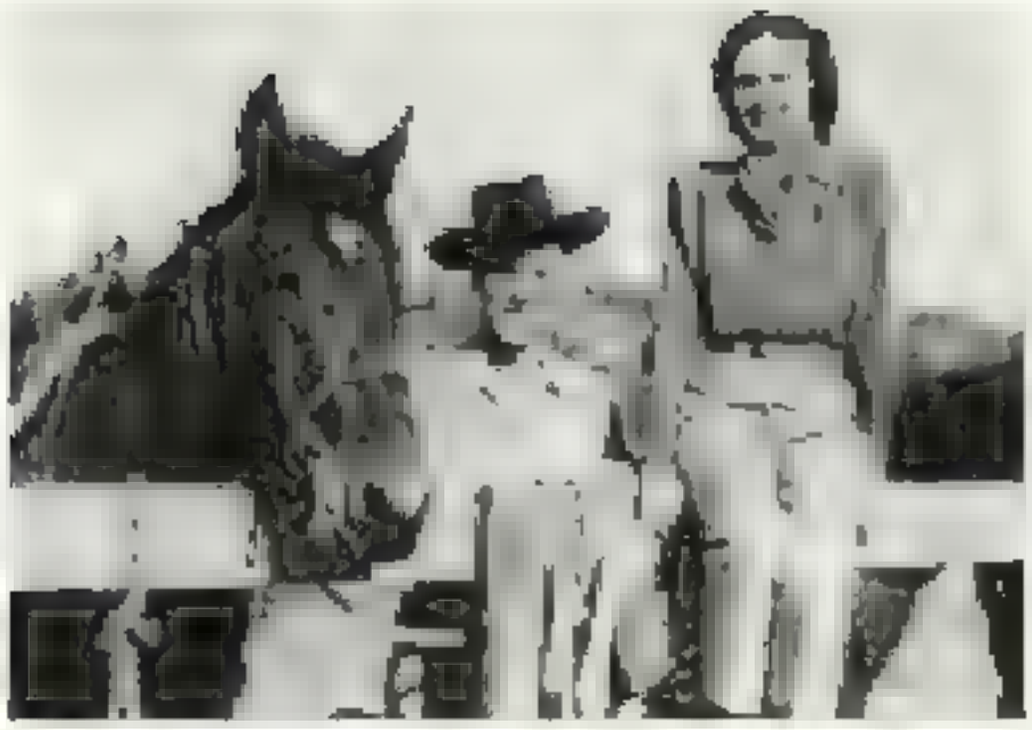
Tune for Quality in This One

Glorious FM Reception

Philco 1284. A true quality radio-phonograph with amazing tonal output. Gets static free FM reception. $259.95*

*Prices slightly higher Beyond the West.

Wednesday's singing / Listen to Philco Radio Time starring BING CROSBY, Wednesday 10 P.M. in the East 9 P.M. over the entire ABC Network and many additional stations



Warm western hospitality and warm desert sunshine will brighten your winter in *Arizona's*

VALLEY OF THE SUN

Riding and hiking along the Apache Trail near Phoenix

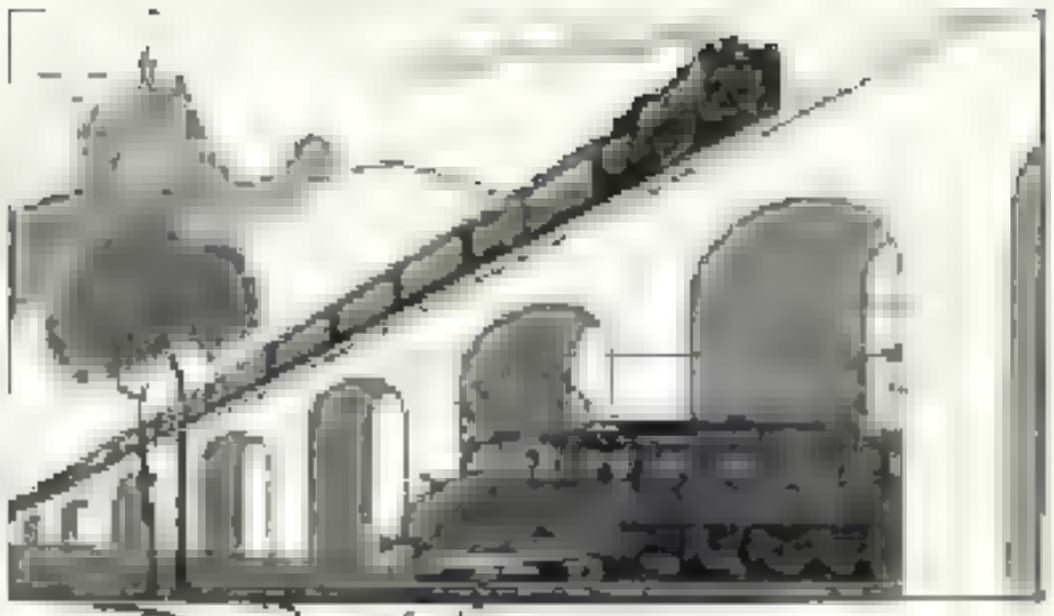
Here [illegible] resorts and charm[illegible] homes. Here's Amer[illegible] climate. Here, too, there are as many things to see and explore as you'd find on a flat continent — including scenic wonders, ancient ruins, Indian ceremonials, horse racing, hunting, cattle ranching, gamecock fighting and Arizona's Valley of the Sun is on the [illegible] railway, highways. Plan now to come early this winter. Reservations are easier to secure before January.

Send 35c for pictorial booklets

Valley of the Sun Club

PHOENIX, ARIZONA

Water sports and sun-bathing are favorite winter sports at Arizona resorts



French RENAISSANCE

[illegible] 1947

[illegible]

See your travel agent.

FRENCH *National Railroads*

610 FIFTH AVENUE, NEW YORK, N. Y.

THE GIFT OF

Broader Vision

TRAVEL, SPORTS, NATURE STUDY

[illegible] gift [illegible] special, choose one of the new Bausch & Lomb Zephyr Light binoculars — back in a powerful version that [illegible] surpasses, in ease of use and [illegible] perfect [illegible] glasses previously known. Write for new 32-page catalog. Bausch & Lomb Optical Co. [illegible] Rochester 2, N. Y.

Lucky is the woman who owns a Home Freezer

In the [illegible] General Electric Home Freezer, [illegible] pounds of fresh food — [illegible], fish, and ice cream by the gallon.

And lucky is the man of the house, too!

When you [illegible] General Electric Home Freezer, you can [illegible] according to the season — when quality is best and prices are right!

You're both lucky *(and smart)*

to own a dependable General Electric Home Freezer

General Electric Home Freezers are available in [illegible] models.

This freezer has the [illegible] unit — the same mechanism used in General Electric Refrigerators. Therefore, [illegible] or more.

So economical, in the Perfect Seal Cabinet that [illegible] does, even [illegible].

Because of its inherent efficiency, this freezer costs but a few pennies a day to operate. See your General Electric dealer or General Electric Company, Bridgeport 2, Conn.

GENERAL ELECTRIC

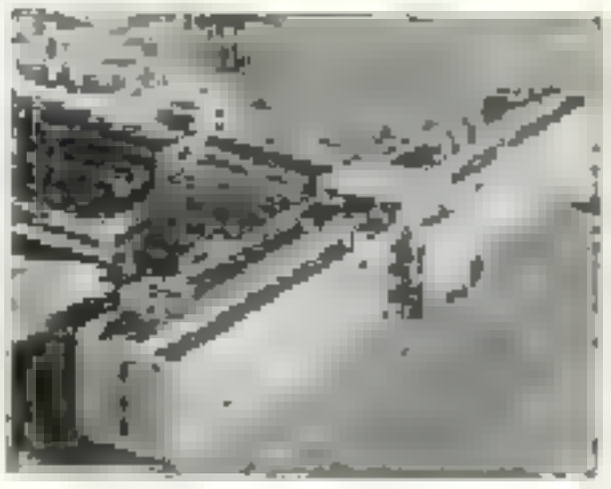
Your enjoyment stands to gain through radio and television achievements of RCA Laboratories.

RCA LABORATORIES—your "magic carpet" to new wonders of radio and television

[illegible]

[illegible]

[illegible]



RCA Laboratories [illegible]

RADIO CORPORATION of AMERICA

"Our fondest memory

—the day our Magnavox came!"

the magnificent **Magnavox** radio-phonograph

TAVANES

from the Hands of the World's Foremost Craftsmen

Outstanding dining hotels in the

Sheraton Belvedere

BOTH ARE IN BALTIMORE

"THE ORDER IS MINE IF I GET THERE FIRST . . . BUT IS THERE TIME?"

Yes! THE AIRLINES GAIN YOU *Time...Time...TIME!*

Time . . . that's what you gain when you go by air! Time to get the job done right . . . time to cover larger sales territories. More profitable hours added to weekend journeys . . . extra days at your destination on longer trips. Yes, the airlines give you time.

Fly Martin . . . Gain Time!

And that's why major airlines are equipping with swift, streamlined Martin transports. For these big, roomy airliners, 300 miles faster than the planes they supplant, brings high express speeds to *every* airline city. High above plodding surface vehicles . . . away from dirt, noise and crowds . . . they whisk you along in luxurious comfort while the miles slip past as if by magic. They're tops among transports.

Proved in Service

Now in airline service, the Martin 202 has opened a new era of swift, dependable transportation. Meanwhile, Martin is spurring production so more Americans can fly on these advanced airliners . . . and gain *Time, Time, TIME!*

THE GLENN L. MARTIN CO., BALTIMORE 3, MD.

An Interesting Invitation

New developments at Aircraft Marines, Inc. Aerial gun turrets • Guided missiles • Electronic computers for both government and commercial service • Aircraft [illegible] Development of factory [illegible] • [illegible] in U. S. Rubber [illegible] • [illegible] in conjunction with Westinghouse [illegible] • [illegible] to Aircraft Marines, Inc. Careers in Research to quote the people and build better living in more fascinating fields

Martin

AIRCRAFT

Builders of Dependable Aircraft Since 1909

GET THIS *FREE* BOOK

"[illegible] BY AIR"

[illegible] Hugh Dale

Name

Address

City . . . . . Zone State FG

The greatest improvement IN RECORD PLAYING since the invention of the phonograph

[illegible] Now [illegible] Now [illegible] High speed changer plays up to 12 records automatically. Now [illegible] FM radio [illegible] for rich records in albums. See it . . . hear it . . . at your Admiral dealer today. Walnut only, $289.95* [illegible]

This Christmas
...give the gift
of a "Lifetime"

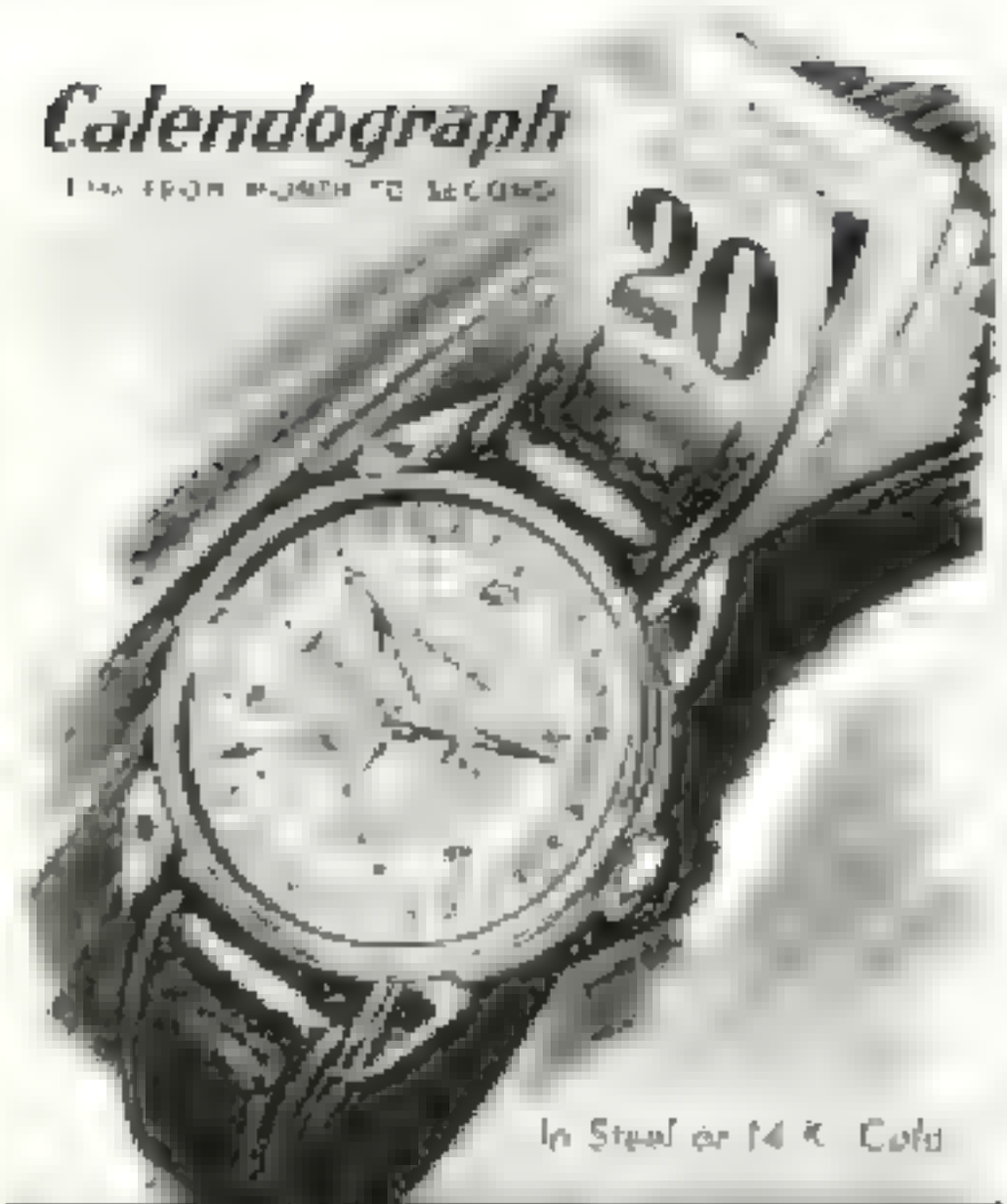
DeJUR *Lifetime*

dual purpose exposure meter

It's the ultra-sensitive single unit exposure meter that gives accurate incident and reflected light readings automatically . . . leaves one hand free for the camera. It's precision engineered . . . guaranteed for a lifetime of trouble-free service.

DeJUR-AMSCO CORPORATION
[illegible] NEW YORK

[illegible]
West Coast [illegible] Los Angeles



MOVADO

[illegible]

[illegible] Watch Agency, [illegible] Ave., N. Y.
In Canada: [illegible], Que.

DEAFENED?

TWO NEW ALL-IN-ONE
Western Electric Hearing Aids
OFFER BETTER HEARING FOR THOUSANDS

NEW MODEL 65

[illegible]

NEW SUPER 66

[illegible]

SEND TODAY FOR TWO FREE BOOKLETS

Western Electric Dept. 380-N12
195 Broadway, New York 7, N. Y.

[illegible]

Name _____

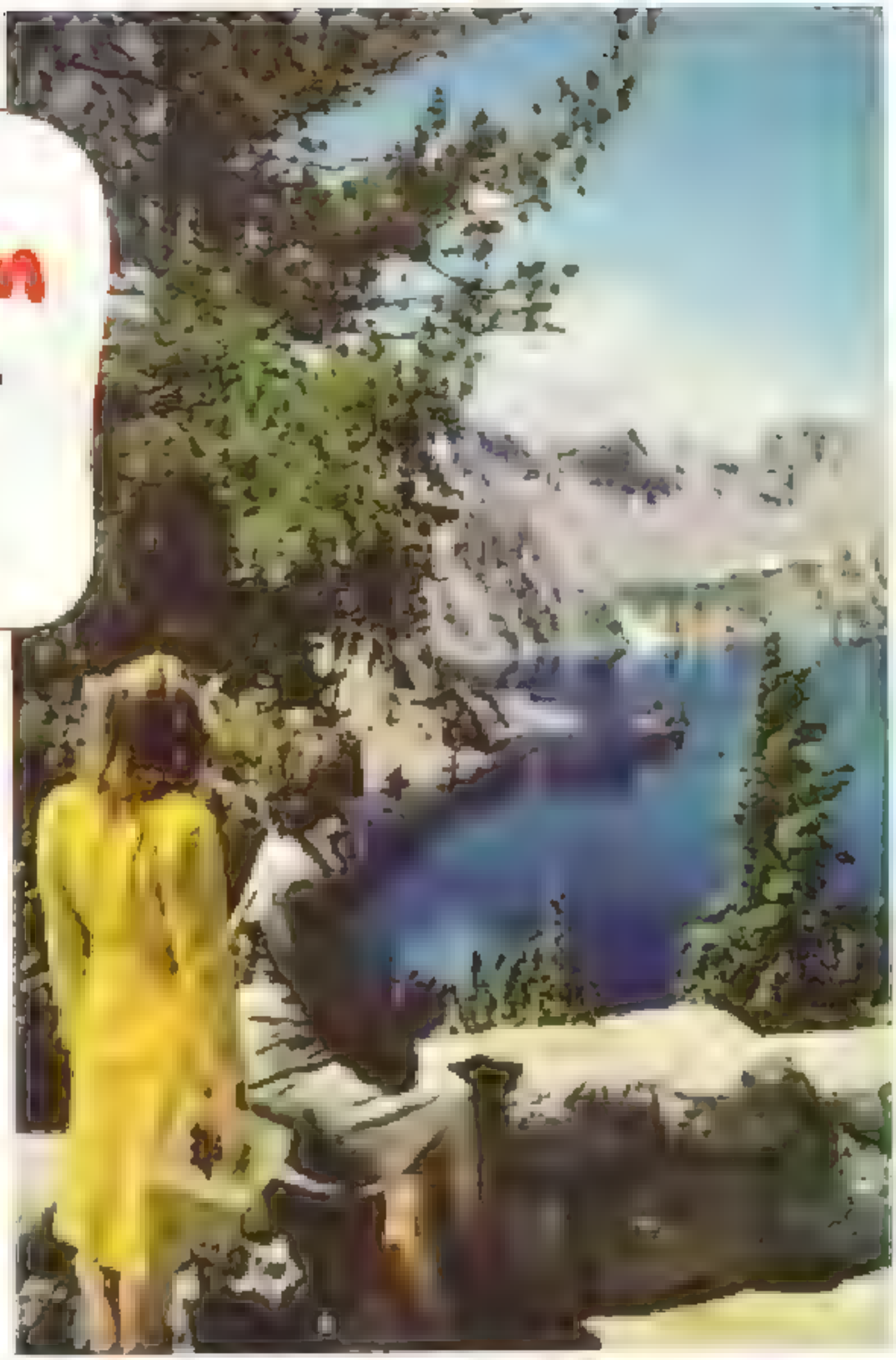
Address _____

City _____ Zone ____ State _____

Oregon

...YOURS TO ENJOY!

You'll find your kind of vacation here in Oregon's green playground. In great mountain forests, storied with tales and legends, there's hiking, climbing and cross-country skiing. Historic Old West ranch towns, rich in pioneer adventure, park lands, campgrounds and lodges offer a rustic environment. Lakes, rivers and sea bordered by the Pacific's broad beaches. Oregon is friendly and informal, with modern accommodations. Send for your passport and budget guide (coupon below) now. Find out why Oregon is wonderful.



Sight-seeing right from Crater Lake Lodge at Crater Lake

Sunset Magazine and Time of the Archaic lakes

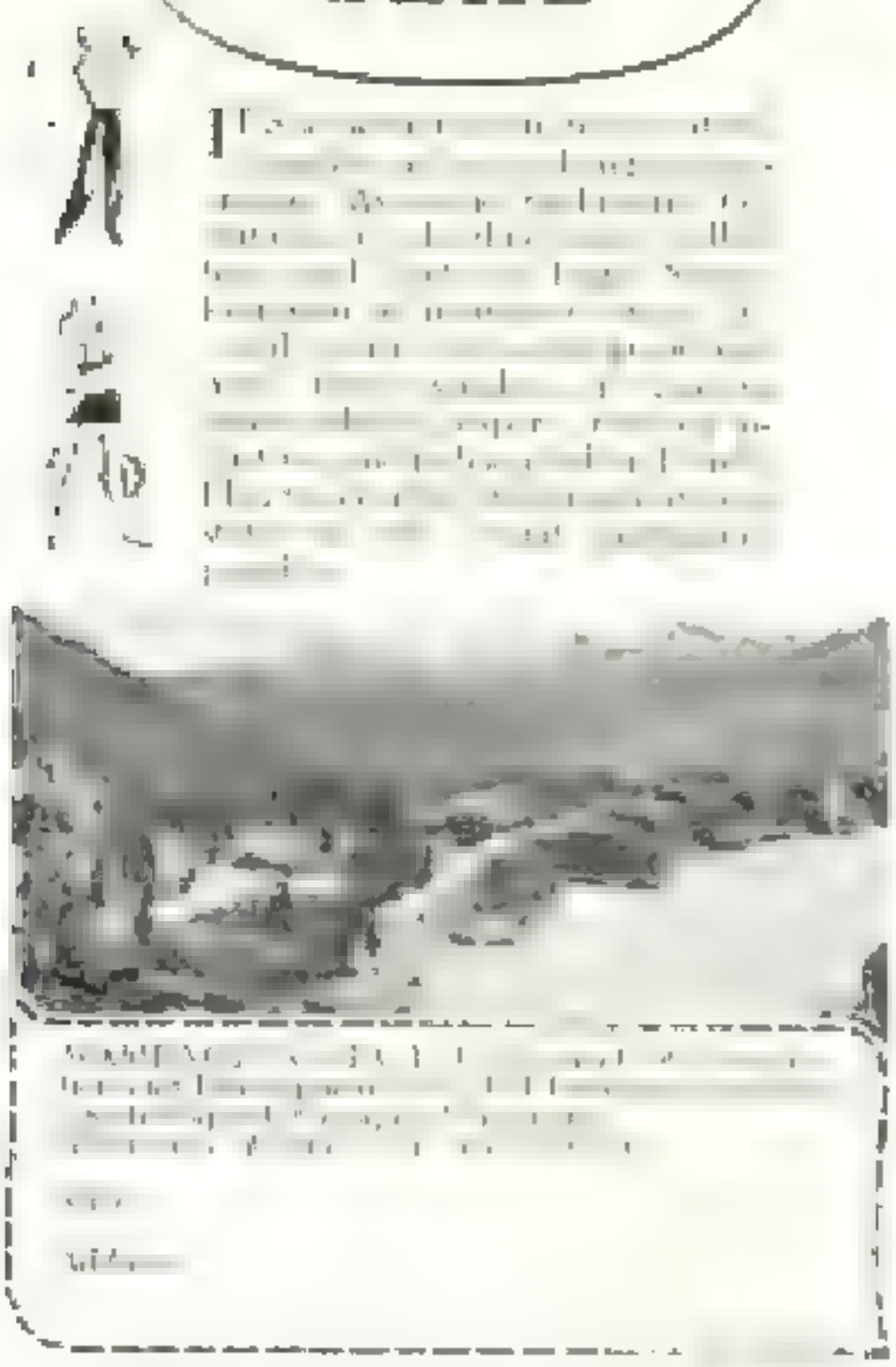
SEE ALL OF

Oregon

BY TRAVEL NO SCENIC HIGHWAYS

There's so much to EXPLORE IN...

Fascinating WASHINGTON STATE

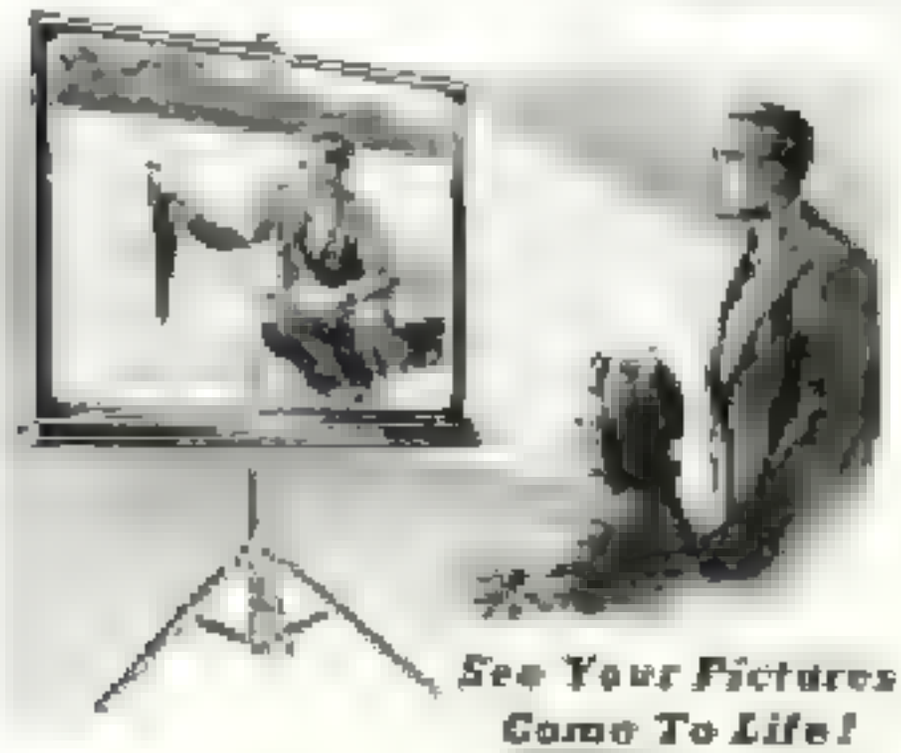


YES! Today You can buy a

DA-LITE

...world's largest-selling screen

at less than 1937 prices!



See Your Pictures Come To Life!

● Why put off enjoying *professional* [illegible] of your [illegible] at home or [illegible] Da-Lite, with 38 years of experience [illegible] screen performance [illegible] [illegible] Da-Lite [illegible] [illegible] [illegible]

The world-famous [illegible] Model [illegible] [illegible] [illegible]

YOU DON'T NEED A FORTUNE TO OWN THIS

Fine Radio-Phonograph

If you have [illegible] wanted a truly fine radio-phonograph but have found them too expensive, here is the set you've dreamed about.

This magnificent instrument [illegible] Westinghouse [illegible] at a price [illegible]

[illegible]

HOME RADIO DIVISION, SUNBURY, PA

Listen . . . and you'll buy

Westinghouse

Tune in Ted Malone Monday through Friday
11:45 A.M. E.S.T. American Broadcasting Company Network

THIS CHRISTMAS GIVE SUNSHINE

GIVE a gift that's new, thrilling, different . . . to your family, to someone special. Even yourself. Give Sunshine — a glorious winter vacation in Florida! Wrapped up in your gift will be days and nights of gay, fascinating fun, laughter and leisure romance and relaxation . . . to be enjoyed this winter and treasured in unforgettable memories over and over again.

Your gift offers these pleasures, too! . . . Sun bathing on the warm sands of beaches, swimming, golf, fishing, hunting, sailing. Fun in the grandstand — watching the exciting spectator events that make Florida's winter calendar. And, best of all, just lazily soaking up the healthful sunshine.

And be sure to include a sight seeing trip around the state . . . to Florida's many unusual attractions, to springs, parks, gardens and historic landmarks. Whether you label it "Do Not Open 'Til Christmas," or present it now, your gift of Sunshine will be the most satisfactory investment you ever made!

LOOK TWICE AT FLORIDA! . . . Sunshine is a year 'round gift to Florida farmers. Right now, your grocer probably has fresh beans and other — only grown in Florida vegetables and fruits . . . Real opportunities await experienced dairymen, poultrymen and stockmen in Florida. Investigate them. There's a sunnier future here for you!

COME TO FLORIDA

THE SUNSHINE STATE

SOME "DOs" AND "DONTs" FOR

APPENDICITIS

—learn the warning signals that may mean appendicitis! The first sign of acute appendicitis is usually pain in the abdomen accompanied by nausea or vomiting.

The pain may be general at first, like a simple stomach-ache, but will probably become focused in the lower right side. It can be a sharp severe pain or a dull ache. Symptoms sometimes vary, so any persistent, puzzling "stomach-ache" should have prompt medical attention.

—call your physician at once when such warnings appear! Appendicitis sometimes is difficult to diagnose. Your doctor may need to take blood samples or make other tests. Calling him promptly permits him to make such tests and to determine the proper treatment before serious trouble occurs.

Appendicitis is [illegible] and is many times fatal in [illegible] days. Many more would be saved if everyone called a doctor at the first sign of an attack.

—treat yourself with home remedies! If you have an abdominal pain and are constipated, avoid taking a laxative, [illegible] may cause the appendix to rupture.

A study of appendicitis in the [illegible] showed that when appendicitis prevailed [illegible] no laxative, [illegible] all those who took a laxative died.

External pressure can also cause a rupture, so you wouldn't rub or massage the site of the pain. And it's wise not [illegible] apply even a hot water bottle or an ice bag.

—try to keep going normally if you suspect appendicitis. Any physical exertion or [illegible] may lead to complications. Lie down, in bed if possible, and stay there.

The pain may let up but this does not mean the attack is over. [illegible] to avoid eating or drinking anything, even water, until your doctor has examined you.

As more people learn more about this disease, appendicitis mortality can be brought still lower. For further information that may protect you and your family, send today for Metropolitan's free book at 137-N, "Appendicitis."

Metropolitan Life Insurance Company

[illegible]

Leroy A. Lincoln, President

1 Madison Ave., New York 10, N. Y.

ED VETERANS—IF YOU HAVE NATIONAL SERVICE LIFE INSURANCE—KEEP IT!

It's priceless . . . to have complete confidence in your tires. That's why General's Top-Quality is preferred by those who value human mileage most. Every mile traveled is safer, more enjoyable, because of blowout protection and extra mileage. Safer, too, since *Action-Traction* gives quick, straight stops, rain or shine.

The GENERAL SQUEEGEE TIRE

Goes a long way to make friends

Hospitality in your refrigerator

Christmas time is hospitality [illegible]

unexpected [illegible]

Coca-Co a pr [illegible]

You hold the key to HIS future

A new bike for Christmas! What dreams it brings to the small boy who gets it. Astride its shining steel he's a knight of arms, or an explorer leading an "expedition" to the corner candy stand. Days, hours, years of careless companionship are the

How many years? You, Mr. Driver, hold the key to that—the ignition key of your automobile.

Let your ignition key be your constant reminder to protect our young bike rider from his enthusiasm. Watch for him. Think for him. Your adult caution today may prevent the "tomorrow" of the child on a new bike.

So think safety and drive safety, always. Teach your child, also, to look out and watch out when riding his bike.

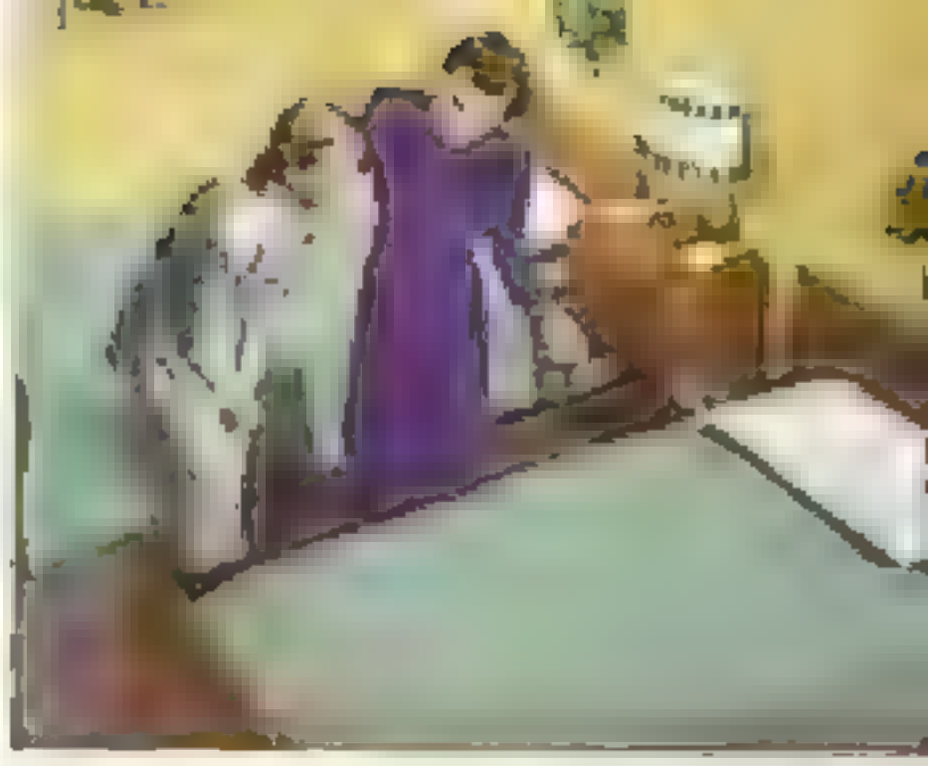
Write Dept. F. R. for your free copy of Lumbermens's booklet, "Bikes — and Boys — and Dads." It contains illustrated information on the "do's" and "don'ts" of bike riding, how to take care of a bicycle, and a safety quiz designed to focus children's attention on safety.

For safety on the highways, for safety in business—look for Lumbermens: Automobile, Boiler, Consequential, Group, Liability, Hospital Insurance and Bonds, through local agents, nationwide and in Canada.

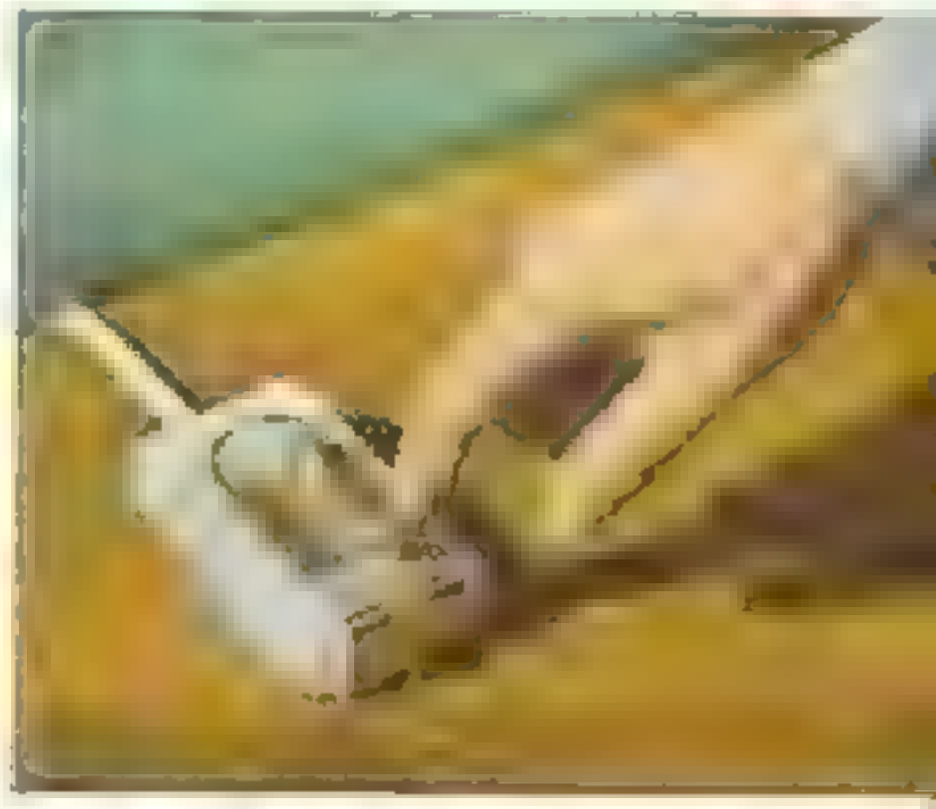
Lumbermens MUTUAL CASUALTY COMPANY

Operating in New York State as Lumbermens Mutual Casualty Company of U. S. • James L. Palmer, Chairman, H. G. Stoner, President, Chicago (26)

1. Grand for couples like the Titus's is General Electric's Twin-control Automatic Blanket. "We couldn't seem to see eye to eye on the temperature we used for perfect sleeping comfort," Jack Titus explains. But now! Two controls, one for each half of the blanket, function independently. He selects his favorite sleeping temperature. She selects hers.



2. "It's wonderful, being able to slip into a prewarmed bed," says smug Mrs. Titus. "No more chilly, wakeful nights!" Here Bernice Titus shows off the automatic blanket on their newly decorated guest room. (Second Electric Blanket "first" again was the convenient new Twin-Bed size.)



3. Guards your comfort automatically! Your set Remote Control [illegible]. At bedtime, turn blanket on. When room temperature drops, Control sends more warmth into blanket. If room temperature rises, less warmth goes into blanket.

"Great gift idea!" say the Tituses, praising General Electric's

AUTOMATIC SLEEPING COMFORT

Read how Bernice and Jack Titus, of Los Angeles (plus 500,000 pleased users) enjoy the coziness of the General Electric Blanket!

4. "Washes like a dream!" says Mrs. Titus. It's certified washable by the American Institute of Laundering. (GNE G-E Automatic Blanket (about 5 pounds) takes the place of [illegible] (about 15 pounds). Extra security [illegible] Saver storage space.

5. Clip this to your Christmas list! G-E Blankets come in rose, cedar, green, blue. One-Control or Twin-Control. [illegible] x 80 inches [illegible] quarter or double bed, $[illegible] and $[illegible] plus tax. Twin-Bed size, 66 x 80 inches, $[illegible], plus tax. At department, furniture stores, electric service companies. G-E Blankets: General Electric Company, Bridgeport 4, Conn.

Made to General Electric specifications—and approved by Underwriters' Laboratories, Inc.

GENERAL ELECTRIC

Give MAPS

For Christmas

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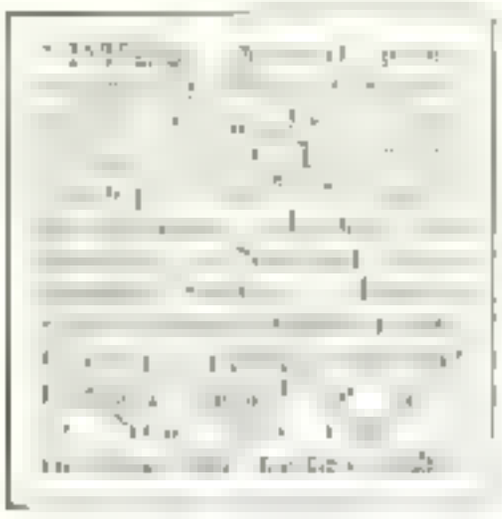

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THE RESPONSIBILITY OF MANAGEMENT IN THE BELL SYSTEM

It used to be that the owners of practically every business were themselves the managers of the business. Today, as far as large businesses are concerned, a profound change has taken place. In the Bell System, for instance, employee management, up from the ranks, and not owner management, is responsible for running the business.

This management has been trained for its job in the American ideal of respect for the individual and equal opportunity for each to develop his talents to the fullest. A little thought will bring out the important significance of these facts.

Management is, of course, vitally interested in the success of the enterprise it manages, for if it doesn't succeed, it will lose its job.

So far as the Bell System is concerned, the success of the enterprise depends upon the ability of management to act as a trustee for the interest of all concerned—the millions of telephone users, the hundreds of thousands of employees, and the hundreds of thousands of stockholders. Management necessarily must do the best it can to reconcile the interests of these groups.

Of course, management is not infallible; but, with its intimate knowledge of all the factors, management is in a better position than anybody else to consider intelligently and act equitably for each of these groups—and in the Bell System there is every incentive for it to wish to do so.

Certainly in the Bell System there is no reason either to underpay labor or overcharge customers to increase the "private profits of private employers," for its profits are limited by regulation. In fact, there is no reason whatever for management to exploit or to favor any one of the three great groups as against the others and to do so would be plain stupid on the part of management.

* * *

The business cannot succeed in the long run without well-paid employees with good working [illegible] who have put their savings in the enterprise, and without reasonable prices to the customers who buy its services. On the whole these conditions have been well-met over the years in the Bell System.

Admittedly, this has not been and is not an easy problem to solve fairly for all concerned. However, collective bargaining with labor ensures that labor's point of view is forcibly presented. What the investor must have is determined [illegible] the needed additional capital, which can only be obtained in competition with other industries.

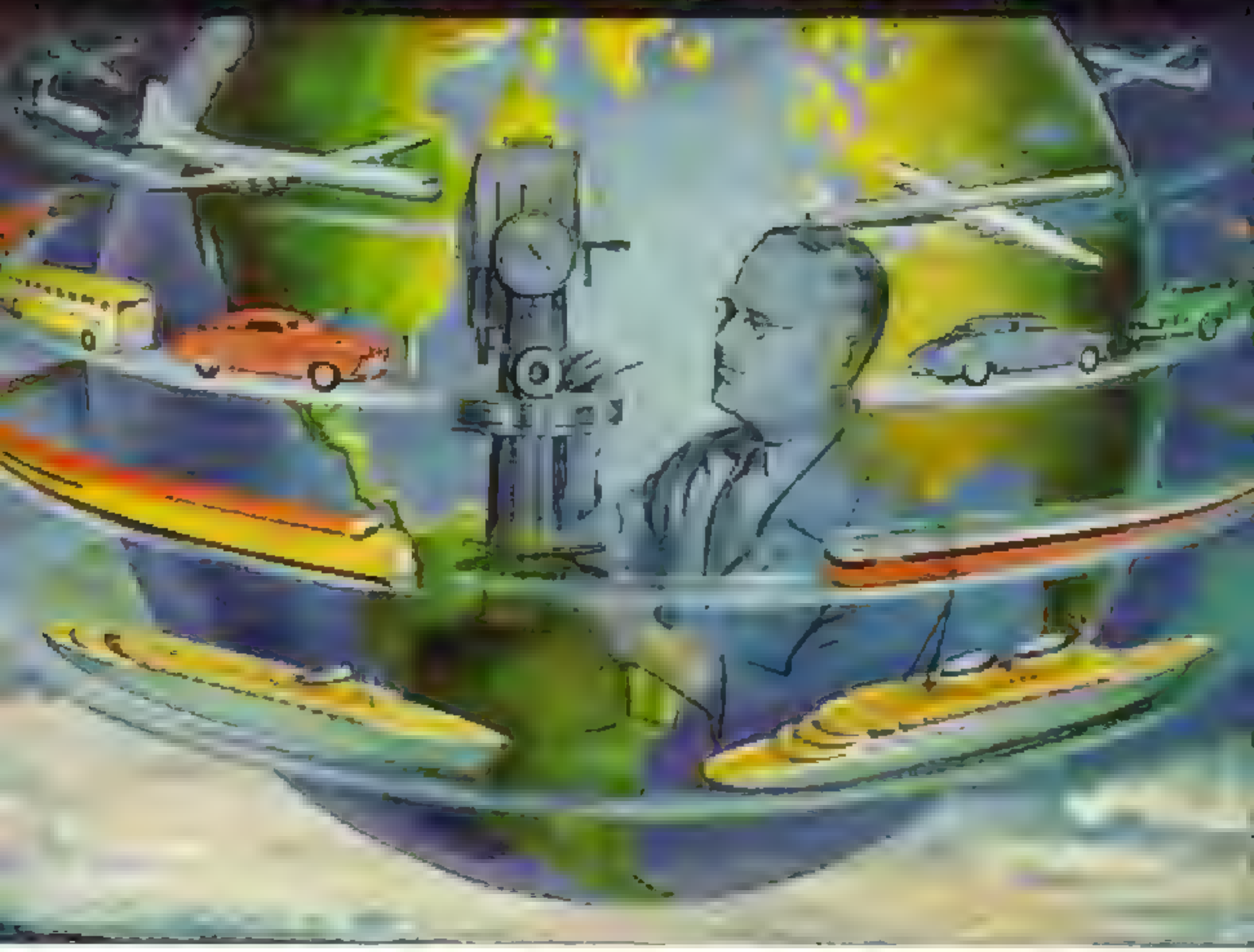
And in our regulated business, management has the responsibility—together with regulatory authorities—to see to it that the rates to the public are such as to assure the money, credit and plant that will give the best possible telephone service at all times.

More and better telephone service at a cost as low as fair treatment of employees and a reasonable return to stockholders will permit is the aim and the responsibility of management in the Bell System.

Walter S. Gifford

WALTER S. GIFFORD, *President*
AMERICAN TELEPHONE AND TELEGRAPH COMPANY

"...Many shall run to and fro, and knowledge will be increased" —DANIEL XII, 4.



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[illegible] for [illegible] of [illegible] and [illegible] [illegible]

There are [illegible] carbon dioxide necessary to the operation of [illegible] methods to supply [illegible] used in [illegible] apparatus of [illegible] transport [illegible] must be [illegible] to stand up under the pressure of logical thought. [illegible]

[illegible] plastics for [illegible] their lightness, [illegible] strength, [illegible] and [illegible] [illegible] new [illegible] power—[illegible] and [illegible] [illegible] [illegible] [illegible]

Producing these [illegible] materials and [illegible] [illegible] the [illegible] of [illegible] and [illegible] and the [illegible] of [illegible] [illegible] the needs of the people of TODAY AND TOMORROW

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